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December 1983



National Aeronautics and  
Space Administration

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## Nomenclature

$d$  - diameter of the test body  
 $Fp$  - focal point on the surface  
 $h$  - wedge distance from the tunnel wall  
 $M$  - Mach number  
 $Nr$  - node of reattachment on the surface  
 $P$  - pressure  
 $Re$  - Reynolds number  
 $S$  - saddle point on the surface  
 $T$  - temperature  
 $t$  - time  
 $u, v, w$ , - velocity components in axial, radial, azimuthal direction  
 $x, r, \phi$ , - coordinates in axial, radial, azimuthal directions  
 $y$  - distance from the cylinder surface  
 $\alpha$  - wedge angle  
 $\beta$  - shock angle  
 $\delta$  - boundary layer thickness  
 $\mu$  - viscosity  
 $\rho$  - density

## Subscripts

$b, body$  - of the body  
 $d$  - based on diameter  
 $max$  - maximum value  
 $min$  - minimum value  
 $o$  - of the outer region  
 $R$  - of the reattachment  
 $S$  - of the separation  
 $T$  - total  
 $v$  - viscous  
 $w$  - wall value  
 $\infty$  - in the far field  
 $1$  - post shock conditions

**An Experimental Investigation of the Impingement of a  
Planar Shock Wave on an Axisymmetric Body at Mach 3.**

by

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**Abstract**

This work presents an experimental study of the flow caused by a planar shock wave impinging obliquely on a cylinder. The investigation was undertaken to attain two goals. First, to experimentally investigate and document the complex three-dimensional shock wave and boundary-layer interaction occurring in practical problems, such as the shock wave impingement from the shuttle nose on an external fuel tank, and store carriage interference on a supersonic tactical aircraft. Second, to supply a data base for numerical computations of complex flows. The experimental techniques included pressure measurements and oil flow patterns on the surface of the cylinder, and shadowgraphs and total and static pressure surveys on the leeward and windward planes of symmetry. The complete data is presented in tabulated form for future use. Some typical results are presented separately and discussed in more detail. The results reveal a highly complex flow field with two separation zones, regions of high crossflow, and multiple reflected shocks and expansion fans.

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## Introduction

There has always been great interest in the fluid dynamic community in predicting complex flow situations that have practical significance<sup>1</sup>. The present paper describes an investigation, in which a complex flow that has practical applications is documented experimentally. The main goal of this investigation was to obtain measurements of sufficient accuracy and detail to reveal important aspects of a certain class of flows encountered, in order to lead to an improved understanding of the details of such flows. During the last several years, advances in computer speed and memory have made possible the development of new computational techniques and a significant improvement in flow modeling. Obviously the value of any computer code and flow model is measured by its ability to numerically predict a complex flow consistent with experimental measurements. A second equally important goal was to document the experimental results for future use, in order to help assess the worth of the present models used, and more importantly, indicate specific areas where improvement is critically needed in the computational procedures.

The impingement of a planar shock wave on a cylindrical body is typical of an entire class of practical aerodynamic flows. Some realistic examples are the impinging of the bow shock from the shuttle nose on the wing leading edge, the wing shock impinging on an external fuel tank, store-wing interaction, store separation, missile launching from supersonic tactical airplanes, and sabot separation in armour piercing ammunition. In all of these examples, the shock impingement from protuberances on other parts of the vehicle could result in heat transfer, stability, control, and force problems which could materially affect the performance of the body in question.

The main features of the above class of three dimensional shock wave turbulent boundary layer interaction flows are duplicated by the experiment shown in figure 1. The test body consists of a cusp like nose, followed by a long cylindrical section aligned with a Mach 3 free stream flow. A wedge spanning the test section generates a planar shock wave which impinges on the cylinder. The turbulent boundary layer-shock wave interaction zone thus formed on the cylinder is the subject of the investigation. Experimental observations were made using oil flow visualization and static pressure measurements on the surface, and static and total pressure surveys on the plane of symmetry in the flow field. Shadowgraphs were also taken of the interaction region.

This class of flows has been studied for many years. Due to the complexity of this flow, early theoretical studies were concentrated on the prediction of inviscid properties for the oblique reflection of shock waves at a rigid wall. Polachek and Seeger<sup>2</sup> found that oblique reflections often result in a strong reflected shock wave and, hence, a high peak pressure at the reflecting surface. Whitham<sup>3,4</sup> has presented an approximate theory for the dynamics of two and three dimensional shock waves, and has applied it to the description of shock impingement on wedges and cones. Bryson and Gross<sup>5</sup> extended the Whitham theory to blunt two and three dimensional bodies, in particular a cylinder and a sphere. Hung<sup>6,7</sup> developed a program for the impingement of a shock wave on a general body of revolution. The need for experimental data of this type becomes obvious, and this work attempts to fulfil that need.

## Description of The Experiment

### Facility

The experiment was conducted in the NASA Ames Research Center High Reynolds Facility, HRC1. This air-charged blow-down facility consists of a large settling tank with flow conditioning screens and interchangeable test sections and nozzles, each designed to produce a particular flow. For the present study, a rectangular supersonic nozzle with a nominal exit Mach number of  $M = 3$  was constructed. This supersonic flow exits into a 25.4 cm wide by 38.1 cm high test section. The nominal free stream flow and test conditions are given in Table 1. The useful test time varies from 5 to 60 minutes depending on the total pressure.

### Model and Test Setup

The test configuration and coordinate system used are shown in figure 1. The test body consists of a 5.08 cm diameter cylinder with a cusp nose rigidly mounted on the centerline of the rectangular test section. The cusp nose was designed using inviscid characteristics theory in order to eliminate the shock waves emanating from the model nose, and hence to produce a disturbance free flow field upstream of the interaction region. The cylindrical model extends nominally 100 cm upstream from its rear support, placing the cusp nose at the nozzle exit plane.

Several different cylindrical bodies were used, depending on the nature of the measurement being made. One section, 101.6 cm long, was instrumented along one body ray ( $\phi_{body} = 0^\circ$ ) with surface pressure taps at axial intervals of 2 cm. Additional pressure taps were placed at axial intervals of 20 cm at  $\phi_{body} = 90^\circ$ ,  $180^\circ$ , and  $270^\circ$  to verify flow symmetry. This section was used alone to obtain surface pressures. A short section, 17.8 cm long was designed to house a traversing mechanism into which a variety of probes could be attached and moved vertically along a path perpendicular

to the axis of the cylindrical model. A potentiometer geared directly to the probe support provided a precise readout of the probe position  $y$ , independent of any driving-gear backlash. The maximum vertical movement of this mechanism was  $y = 2$  cm. Precise axial placement of the various probes was achieved in two ways. First, the traversing mechanism section was used, in conjunction with other short interchangeable sections, to position the survey probe holder at some discrete fixed distances from the model shoulder. Second, the probe itself could slide axially in the holder and then be fixed by means of a set screw.

A two dimensional shock wave generator consisting of a wedge which spans the tunnel width was mounted on the test section wall and attached to a hydraulic cylinder. The hydraulic cylinder had the capacity of continually varying the distance  $h$  of the wedge from the tunnel wall, or holding it constant. Three different shock wave generators with wedge angles of  $\alpha = 13^\circ$ ,  $16^\circ$ , and  $19^\circ$  were used. In all cases the maximum wedge thickness was 5.08 cm.

### Test Technique

The shock wave generator was placed at a given position, and the tunnel was started. Most of the data presented in this paper were obtained using the  $16^\circ$  wedge, at a vertical position  $h = 6.5$  cm from the wall (see figure 1) though some flow visualization data were obtained using the other available shock generators, and at other vertical positions.

The cylindrical test body was fixed in position, leveled, and centered in the test section, and its alignment was checked before each individual run. The cylinder support was designed to allow the test body to be arbitrarily positioned axially ( $x$ ) and circumferentially ( $\phi$ ). In practice, the cylinder was moved upstream or downstream (from its nominal position) a distance of about  $\pm 7.5$  cm, in order to position the probes in the desired axial

location for the flow field surveys. The change in the undisturbed boundary layer height at the measurement station due to the axial movement of the cylinder is approximately 1.2 percent of the nominal boundary layer height, and this was found to have a negligible effect on the measured results.

### Surface Pressures

Surface pressures were obtained using strain gage absolute-pressure transducers connected with short lengths of stainless steel tubing to surface pressure taps on the cylindrical surface. The transducers were calibrated before each run by statically varying the wind tunnel test section pressure. By rotating the cylinder  $\Delta\phi = 10^\circ$  between runs (at a constant axial position) pressure data were obtained at a sufficiently large number of points on the surface. Between 10-15 pressure readings were measured at each point and their results were first averaged and then interpolated to generate an accurate contour plot of these data. The averaged surface pressure results for a wedge angle of  $16^\circ$  are presented in Table 2. The occasional gaps between measurement points in this table represent transducers that were slow in response or had inconsistent calibration curves and their readings were omitted from the presentation. Some surface pressure data was duplicated in different runs to check the reproducibility of the results; this data is also presented in Table 2.

### Oil Flow Visualization

The conventional oil flow technique was used to obtain flow patterns on the cylindrical surface. The surface was covered with a sheet of black "monokote" (a Mylar sheet with an adhesive backing) and coated with a mixture of vacuum pump oil, oleic acid, and titanium dioxide. With the cylindrical model and wedge locked into fixed positions, the tunnel was started and run until a surface flow pattern was established that did not vary with time (approximately 3 minutes). Subsequent to the run, the Mylar



sheet was peeled off and placed on a flat backing board for photographing. Fig. 2 shows the model mounted inside the tunnel after the test. The oil flow patterns are seen clearly on its surface. The insert on the upper left corner shows the Mylar sheet after it was peeled off and laid flat on the backing board.

Oil flow patterns representing all the tested flow conditions are presented in fig. 3. The flow conditions of each experiment are recorded at the bottom of each picture. The only additional features in these pictures are the lines marking the windward ( $0^\circ$ ) and leeward ( $180^\circ$ ) rays of the model.

### Flow Field Surveys

Surveys of static and total pressure in the boundary layer were made in the windward ( $\phi = 0^\circ$ ) and leeward ( $\phi = 180^\circ$ ) planes of symmetry intersecting the cylindrical test body. A typical survey was completed in a single test run by prepositioning the survey mechanism and the probe at a given axial location ( $x$ ) and traversing the boundary layer in one direction ( $y$ ) from the wall towards the edge of the boundary layer and beyond, a maximum vertical distance,  $y_{max}$ , of about 2cm. Surveys were made at axial locations spaced at  $\Delta x = 0.635$  cm in the interaction region and at  $\Delta x = 1.27$  cm upstream and downstream of this region. The probe traversing mechanism was capable of advancing the probe in discrete  $\Delta y$  increments as small as 0.005 cm. Measurements were made using varying  $\Delta y$  increments, ranging from  $\Delta y$  as small as 0.02 cm in the vicinity of the wall to  $\Delta y$  about 0.2 cm in the outer portion of the boundary layer. These surveys were taken at only one Reynolds number,  $Re = 18.2 \times 10^6$  based on the length of the cylindrical body.

Pitot pressures were measured on the windward and leeward symmetry planes using a stainless steel probe that had a uniform wall thickness of

0.003 cm and a rectangular cross section whose outside dimensions were 0.012cm high by 0.1cm wide. The static pressure probe was a  $10^\circ$  cone-ogive followed by a  $2^\circ$  cone-cylinder of 0.07cm diameter. Four small static holes (0.022 cm diameter) were drilled  $90^\circ$  apart, and 0.305 cm from the probe tip according to the criteria developed by Pickney<sup>8</sup>. This probe had the advantage of being less sensitive to flow angularity than the conventional cone - cylinder probe. For redundancy purposes five to ten readings were measured at each point, both for the static and for the total pressure surveys. Later these readings were averaged for further processing.

The averaged pressure measurements are summarized in four tables. Table 3 presents the total pressure on the windward symmetry plane, Table 4 the static pressure on the same plane. Table 5 presents the total pressure on the leeward plane, and Table 6 the static pressure.

Along the windward and leeward symmetry planes, derived parameters such as Mach number, velocity, and density were obtained from the averaged results of the pitot and static pressure surveys. Total temperature was assumed constant and equal to the free stream total temperature. Previous measurements by Kussoy et al<sup>9</sup> at the same test conditions, indicated that the total temperature varied less than half a percent through the boundary layer.

The experimental uncertainties in the mean flow data in the windward and leeward planes are  $\pm 10$  percent for the static pressure (due to flow angularity),  $\pm 6$  percent for the static temperature,  $\pm 12$  percent for density,  $\pm 3$  percent for the velocity and  $\pm 1$  percent for the pitot pressure. The uncertainty in  $y$  is  $\pm 0.01$  cm.

## Discussion of the Experimental Results

### Flow Field Description

The flow field around the body can be divided into four different regions (a) the **windward region** where the shock impinges on the cylinder and the flow is governed by the severe pressure gradients and shear stresses caused by the shock; (b) the **leeward region**, where the flow is generally separated, and is governed by the cross flow and the thickening of the boundary layer; (c) the **upstream region**, ahead of the shock, where the flow is undisturbed parallel to the body axis at Mach 3; and (d) the **downstream region**, behind the wedge expansion fan, where the flow is being straightened by the expansion and where the difference in boundary layer thickness between the leeward and windward regions is still causing some cross flow.

Shadowgraphs obtained during the experiment, show the development of a thick boundary layer ( $\approx 3\text{cm}$ ) on the leeward and an extensive forward influence of the impinging shock. These observations also show the planar shock wave and the expansion fan, verifying the existence of a region between them where the flow is at a constant angle to the body axis.

### Oil Flow Patterns and their Interpretation

A basic understanding of the character of surface properties can be gained by observing the oil flow patterns. Some of the discussion in this section draws conclusions based also on data measured in the flow field (e.g. boundary layer height, separation bubble size, expansion fans, etc), that will be discussed later. A typical oil flow pattern from the unwrapped mylar sheet is shown in Fig 4a. The corresponding skin friction line pattern, constructed following Peake and Tobak <sup>10</sup>, is shown in Fig 4b. In fig. 4a we can see the main features of the surface flow. On the windward, ( $\phi = 0^\circ$ ) there are two saddle points  $S_1$  and  $S_2$ , and two nodes of reattachment  $Nr_1$  and  $Nr_2$ . On the leeward ( $\phi = 180^\circ$ ) there is one node of reattachment  $Nr_3$ , two saddle points  $S_3$  and  $S_4$ , and one focus point  $Fp$ . The oil patterns

show two separation lines on the windward symmetry plane originating from  $S_1$  and  $S_2$ . The most upstream of the two lines which originates at  $S_1$  terminates in the focal point  $Fp$ , while the other wraps around the body changing its attitude from lateral to axial and becomes a primary leeward separation line \*. A secondary leeward separation line originates from  $S_4$ . The pattern of two parallel separation lines on the leeward is typical of a cylinder at an angle of attack, and has been observed previously by Yanta and Wardlaw<sup>12</sup> and by Boersen<sup>13</sup>. (The surface pattern changes significantly with some flow and geometrical parameters as we shall see later). An additional feature to notice is the intense cross flow on the sides of the body ( $10^\circ < \phi < 100^\circ$ ) between  $x = 50$  cm and  $x = 60$  cm, which is of the same magnitude as the axial flow in this region, as is evident from the lateral direction of the surface lines.

The leeward interaction flow ( $120^\circ < \phi < 180^\circ$ ) shows three distinct regions. The first region (between  $x=55$  cm and  $x=60$  cm) is characterized by a thick boundary layer and is almost stagnant. The flow direction in this region is very difficult to assess from the oil flow results shown in fig. 4. The adverse pressure gradient which is fed laterally from the free stream to the vicinity of the wall, and the intense cross flow both contribute to the thickening of the boundary layer in this region. The middle region, (between  $x=60$  cm and  $x=70$  cm) is characterized, as mentioned above, by two separation lines similar to those on the back of a cylinder at an angle of attack (see also Peake and Tobak<sup>14</sup>). The two separation lines  $S_2$  and  $S_4$  are typical of an imprint of the two pairs of counter rotating wake vortices<sup>12</sup>. The downstream region, (from  $x=70$  cm) is affected by

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\*There is some controversy about the definition of three dimensional separation. One view states that skin friction lines that converge and form a line that passes through a saddle point, form a separation line<sup>10</sup>; the other view states that only if a sheet of fluid actually leave the surface the footprint of this sheet on the surface is a separation line<sup>11</sup>. In this paper we adopt the first view for convenience, without casting any judgment on the correctness of either of these views.

the expansion fan off the top of the wedge and is therefore of less interest. The straightening of the flow in this region weakens the separation lines which eventually disappear.

In order to gain a better understanding of what effects the variation of wedge height  $h$ , total pressure  $P_T$ , and wedge angle  $\alpha$ , have on the surface skin friction lines as traced out in the oil flow visualization technique, a systematic parametric study was carried out. The various test conditions of this study are listed in Table 1(b). The oil flow results for these conditions are shown in figures 5, 6, and 7. To clarify some of the surface flow details which may not be evident in the reproductions of the oil flow pictures, a sketch interpreting the oil flow results in the vicinity of  $\phi = 0^\circ$  is shown adjacent to each photo. All the measurements which are discussed below were taken at  $h = 6.5\text{cm}$ ,  $P_{T\infty} = 25\text{ psia}$ , and  $\alpha = 16^\circ$ . The surface oil flow for this combination of parameters appears in figures 5b and 6b. The effect of shock wave generator (wedge) angle  $\alpha$  is shown in Fig. 5. The stronger shock generated by the  $19^\circ$  wedge (fig. 5c) causes a dual separation line, as was also reported by Sedney and Kitchens<sup>15</sup>. This pattern is typical of a large obstacle, of the order of  $\delta$ , embedded in the boundary layer and can be explained in our case by the large separation bubble which acts as such an obstacle. Surface stream line patterns, on the windward ray ( $\phi = 0^\circ$ ), show the primary saddle  $S_1$  and secondary nodal point of attachment  $Nr_2$  very clearly (refer to figure 5b). The primary attachment point  $Nr_1$  almost merges with the secondary saddle  $S_2$ , but can still be distinguished. A decrease in the shock intensity by reducing the wedge angle will cause a respective reduction in bubble size, and will enhance the merging of the secondary saddle and the adjacent node as can be seen in fig. 5b, as observed by Sedney and Kitchens<sup>15</sup> and discussed by Peake and Tobak<sup>16</sup>. A further reduction in shock intensity, which causes a corresponding reduction in the separation bubble size, breaks completely the secondary separation line

(fig. 5a). This observation is consistent with the results reported by Sedney and Kitchens if the separation bubble deflects the flow like an obstacle embedded in the boundary layer.

A second parameter with similar effects on the separated region is the total pressure  $P_T$ . Fig. 6a shows the dual windward separation lines at low total pressure, suggesting the presence of a thick separation bubble. The thick bubble at low pressures can be a Reynolds number effect, since the turbulence transport coefficients are reduced. An increase in total pressure, associated with an increase in Reynolds number and consequently a decrease in bubble size, causes the secondary saddle point to merge with the reattachment node (see fig. 6b). A further increase in pressure (fig. 6c) results in a complete breakdown of the secondary separation line suggesting a further decrease in bubble size.

Several factors contribute to a decrease in shock intensity when the wedge is moved away from the body. The major factor is probably the variations in blockage area between the wedge and the model. A second factor is the boundary layer developing on the wedge ramp, and reducing the shock intensity with distance from its origin. Fig. 7 shows the effect of varying the wedge distance  $h$  from the tunnel wall. Although the resulting change in shock intensity at the impingement point is small, we can see its effect. In fig. 7a the distance  $h$  is 0.0 cm. i.e. the distance  $y$  from the body to the wedge is maximum and consequently the shock is weaker. The result is a small bubble size and the secondary separation line is broken. Driving the wedge to  $h = 6.5$  cm (fig. 7b), and to  $h = 8$  cm (fig. 7c) results in a progressively stronger shock. The bubble keeps growing in size, introducing a larger obstacle into the boundary layer. The secondary line of separation becomes complete (fig. 7b), and finally the separation bubble becomes an obstacle big enough to separate the node point  $Nr_1$  from the secondary separation line  $S_2$  (fig. 7c).

### Surface Pressure

Surface static pressure distributions were measured on axial rays every  $\Delta\phi = 10^\circ$  around the cylinder. The windward and leeward results are presented in fig. 8. The main features of the windward profile ( $\phi = 0^\circ$ ) are the pressure rise at the foot of the shock, the double hump in the high pressure region, and the downstream pressure drop caused by the wedge expansion fan. The second pressure maximum on the windward ray, at  $x = 60$  cm, is not an aberration caused by scatter in the data. The cylindrical body was rotated  $\pm 10^\circ$ , and moved up and downstream  $\pm 3$  cm in order to obtain surface pressures in many points. This second maximum was observed in all measurements independent of body movement, using different pressure taps and different transducers. The leeward profile ( $\phi = 180^\circ$ ) shows a very small pressure rise, suggesting that this whole region is in a wake of separated flow. The extent of forward influence can also be drawn from this profile, since the plane of the inviscid shock wave passes across the back of the body at  $x = 62$  cm while the actual pressure rise starts at  $x = 55$  cm, meaning about 6 upstream boundary layer thicknesses of forward influence.

Surface pressure contours display a graphic picture of where the pressure extrema and pressure gradients are of significant influence. Fig. 9 shows the experimental surface pressure contours as well as the main features of the oil flow pattern which are sketched in bold lines. The severe pressure gradients at the foot of the shock ( $x = 52$  cm) on the windward plane ( $\phi = 0^\circ$ ) are congruent with the dual separation lines in the oil flow picture. Surprisingly, the contours show the same magnitude of pressure gradients in the lateral direction. These gradients are responsible for the severe cross flow which in turn, causes a leeward separation, similar to that

on a cylinder at an angle of attack as was discussed earlier. A somewhat unpredictable feature is the point of minimum pressure at  $\phi = 100^\circ$  and  $x = 58\text{cm}$ . This minimum occurs exactly where the leeward separation line bifurcates, and the resulting two lines of separation follow the two pressure valleys that lead downstream from this point. The surface pressure gradients on the leeward are very small, also showing that the flow is of a separated wake type.

#### Pressure Surveys on the Symmetry Plane

Additional details of this complex flow field were obtained from pressure surveys that were taken on the windward and leeward planes of symmetry. Fig. 10 shows the results of pressure surveys in six locations, representing the main flow features on the windward plane. Fig 10a shows the static pressure  $P$ , fig 10b the total pressure  $P_t$ , and fig. 10c the location and extent of the individual surveys superimposed on a general sketch of the flow field. Survey "A" ahead of the interaction shows the beginning of the static pressure rise near the shock (fig 10a,  $y = 2\text{ cm}$ ), and the upstream boundary layer edge as picked up by the total pressure profile (fig. 10b,  $y = 1.2\text{ cm}$ ). Survey "B" hits the incident shock at the boundary layer edge. Survey "C" traverses the bubble. The pressure at "C" shows no change near the surface, indicating the presence and extent of the bubble in this location; thereafter the static pressure decreases to the pressure of the local expansion fan. To distinguish it from the wedge expansion, this expansion fan is indicated 'separation bubble expansion' in figure 10c, since it originates from the bubble. Traversing further from the body, the survey encounters another shock which is the 'separation shock'. Survey "D" just behind the separation, passes through yet another shock at  $y = 0.5\text{cm}$ , called the 'recompression shock' for obvious reasons. Surveys "E" and "F"



show the same structure as it recedes from the body surface at a constant angle.

The leeward flow field is simpler. The static pressure surveys in fig. 11a and total pressure in fig. 11b show a single shock passing obliquely through this region. The forward influence of the shock here can be deduced from the axial position of the surveys. Based on inviscid shock calculations, the pressure on the leeward plane of symmetry should start rising at  $x = 62$  cm. However the measured pressure starts to rise at  $x = 56$  cm consistent with the surface measurements. The boundary layer thickness downstream of the interaction is more than the traversing span in this region.

#### Pressure Contours

The symmetry plane flow structure is illustrated further in fig. 12. Fig. 12a shows the static pressure contours with the three shock waves superimposed. Points of interest in this figure are the two reflected shocks, the pressure hill behind the intersection of the incident shock and the separation shock, and the pressure valley between the two reflected shocks which substantiates the existence of an expansion fan emerging from the separation bubble. The pressure peak at the wall behind the shock system is decaying fairly fast because the wedge expansion fan, from the wedge ramp corner, hits the body at  $x \approx 60$  cm. The total pressure contours in fig 12b show the same features, corroborating the above findings. Additional details obtained from the total pressure contours are the boundaries of the separation region which is clearly divided into two distinct bubbles the front one thinner than the other.

### Concluding Remarks

1) Experimental measurements of a planar shock wave impinging obliquely on a cylinder, were made on the body surface and in the plane of symmetry, to obtain an understanding of a certain class of flows. The flow field includes an incident and reflected shock wave system, windward and leeward three dimensional separation, and severe cross flow. The experiment is of sufficient quality and detail to obtain greater understanding of this class of flows.

2) The incident shock wave is sufficiently strong to produce a large, double separation bubble. Two reflected shocks and an expansion fan are observed in the windward region. Wake type flow with double separation is observed in the leeward region. The surface flow structure exhibited an intense lateral cross flow. This cross flow thickens the boundary layer and causes significant upstream influence on the leeward.

3) The test results were processed and tabulated for future use as a data bank for computational fluid dynamics.

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**TABLE 1(a)**  
**Nominal Flow Conditions**

$P_{T\infty}$ psia.	10	25	80
$M_{\infty}$	2.80	2.85	2.95
$T_{T\infty}$ °K.	278	278	278
$T_{\infty}$ °K.	108.2	105.8	101.4
$\delta^*$ cm.	0.44	0.35	0.3
$\delta_0$ cm.	1.44	1.22	1.1
$Re_l \times 10^{-6}$	7.28	18.2	58.3

**TABLE 1(b)**  
**Nominal Test Conditions**

$P_{T\infty}$ , psia.	$\alpha$ , deg.	$h$ , cm.
80	16	6.5
25	19	8, 6.5, 0
25	16	8, 6.5, 0
25	13	8, 6.5, 0
10	16	6.5

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 165A THETA= -10.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6631E+00
0.1500E+02	0.6488E+00
0.2000E+02	0.7356E+00
0.2500E+02	0.7713E+00
0.3200E+02	0.7912E+00
0.3400E+02	0.7906E+00
0.3600E+02	0.7976E+00
0.3800E+02	0.7974E+00
0.4000E+02	0.8201E+00
0.4200E+02	0.7610E+00
0.4400E+02	0.7786E+00
0.4800E+02	0.7500E+00
0.5000E+02	0.7308E+00
0.5400E+02	0.4101E+01
0.5600E+02	0.4007E+01
0.5800E+02	0.3705E+01
0.6000E+02	0.3165E+01
0.6200E+02	0.1871E+01
0.6600E+02	0.8083E+00
0.6800E+02	0.6114E+00
0.7000E+02	0.5043E+00
0.7500E+02	0.4999E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2074E+01
0.1500E+02	0.2123E+01
0.2000E+02	0.2171E+01
0.2500E+02	0.2314E+01
0.3200E+02	0.2562E+01
0.3400E+02	0.2531E+01
0.3600E+02	0.2530E+01
0.3800E+02	0.2469E+01
0.4000E+02	0.2472E+01
0.4200E+02	0.2498E+01
0.4400E+02	0.2483E+01
0.4800E+02	0.2388E+01
0.5000E+02	0.2173E+01
0.5400E+02	0.1338E+02
0.5600E+02	0.1287E+02
0.5800E+02	0.1069E+02
0.6000E+02	0.1017E+02
0.6200E+02	0.5886E+01
0.6600E+02	0.2553E+01
0.6800E+02	0.1873E+01
0.7000E+02	0.1520E+01
0.7500E+02	0.1547E+01

TEST 47 RUN 165B THETA= 0.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6848E+00
0.1500E+02	0.6612E+00
0.2000E+02	0.7282E+00
0.2500E+02	0.7769E+00
0.3200E+02	0.8146E+00
0.3400E+02	0.8120E+00
0.3600E+02	0.8287E+00
0.3800E+02	0.8286E+00
0.4000E+02	0.8243E+00
0.4200E+02	0.7770E+00
0.4400E+02	0.8018E+00
0.4800E+02	0.7736E+00
0.5000E+02	0.8357E+00
0.5400E+02	0.4143E+01
0.5600E+02	0.4036E+01
0.5800E+02	0.3714E+01
0.6000E+02	0.3170E+01
0.6200E+02	0.1895E+01
0.6600E+02	0.8159E+00
0.6800E+02	0.6373E+00
0.7000E+02	0.5116E+00
0.7500E+02	0.5376E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2070E+01
0.1500E+02	0.2113E+01
0.2000E+02	0.2136E+01
0.2500E+02	0.2296E+01
0.3200E+02	0.2498E+01
0.3400E+02	0.2517E+01
0.3600E+02	0.2572E+01
0.3800E+02	0.2497E+01
0.4000E+02	0.2505E+01
0.4200E+02	0.2520E+01
0.4400E+02	0.2506E+01
0.4800E+02	0.2388E+01
0.5000E+02	0.2213E+01
0.5400E+02	0.1320E+02
0.5600E+02	0.1274E+02
0.5800E+02	0.1069E+02
0.6000E+02	0.9923E+01
0.6200E+02	0.5805E+01
0.6600E+02	0.2510E+01
0.6800E+02	0.1884E+01
0.7000E+02	0.1489E+01
0.7500E+02	0.1639E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 165C THETA= 10.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.6725E+00	0.1000E+02	0.2057E+01
0.1500E+02	0.6619E+00	0.1500E+02	0.2120E+01
0.2000E+02	0.7110E+00	0.2000E+02	0.2132E+01
0.2500E+02	0.7862E+00	0.2500E+02	0.2306E+01
0.3200E+02	0.8054E+00	0.3200E+02	0.2512E+01
0.3400E+02	0.7878E+00	0.3400E+02	0.2508E+01
0.3600E+02	0.8243E+00	0.3600E+02	0.2549E+01
0.3800E+02	0.8142E+00	0.3800E+02	0.2473E+01
0.4000E+02	0.7798E+00	0.4000E+02	0.2470E+01
0.4200E+02	0.7445E+00	0.4200E+02	0.2485E+01
0.4400E+02	0.7890E+00	0.4400E+02	0.2486E+01
0.4800E+02	0.7400E+00	0.4800E+02	0.2348E+01
0.5000E+02	0.8583E+00	0.5000E+02	0.2113E+01
0.5400E+02	0.4172E+01	0.5400E+02	0.1339E+02
0.5600E+02	0.4012E+01	0.5600E+02	0.1281E+02
0.5800E+02	0.3709E+01	0.5800E+02	0.1069E+02
0.6000E+02	0.3126E+01	0.6000E+02	0.9903E+01
0.6200E+02	0.1869E+01	0.6200E+02	0.5782E+01
0.6600E+02	0.7800E+00	0.6600E+02	0.2475E+01
0.6800E+02	0.6625E+00	0.6800E+02	0.1882E+01
0.7000E+02	0.5071E+00	0.7000E+02	0.1477E+01
0.7500E+02	0.5318E+00	0.7500E+02	0.1598E+01

TEST 47 RUN 165D THETA= 20.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.6758E+00	0.1000E+02	0.2087E+01
0.1500E+02	0.6769E+00	0.1500E+02	0.2145E+01
0.2000E+02	0.6603E+00	0.2000E+02	0.2102E+01
0.2500E+02	0.7870E+00	0.2500E+02	0.2318E+01
0.3200E+02	0.8237E+00	0.3200E+02	0.2540E+01
0.3400E+02	0.8035E+00	0.3400E+02	0.2515E+01
0.3600E+02	0.8328E+00	0.3600E+02	0.2590E+01
0.3800E+02	0.8300E+00	0.3800E+02	0.2513E+01
0.4000E+02	0.7920E+00	0.4000E+02	0.2464E+01
0.4200E+02	0.7684E+00	0.4200E+02	0.2536E+01
0.4400E+02	0.7995E+00	0.4400E+02	0.2528E+01
0.4800E+02	0.7385E+00	0.4800E+02	0.2351E+01
0.5000E+02	0.7843E+00	0.5000E+02	0.2297E+01
0.5400E+02	0.3870E+01	0.5400E+02	0.1243E+02
0.5600E+02	0.3846E+01	0.5600E+02	0.1222E+02
0.5800E+02	0.3548E+01	0.5800E+02	0.1069E+02
0.6000E+02	0.3178E+01	0.6000E+02	0.9907E+01
0.6200E+02	0.1901E+01	0.6200E+02	0.5855E+01
0.6600E+02	0.7925E+00	0.6600E+02	0.2548E+01
0.6800E+02	0.6920E+00	0.6800E+02	0.1977E+01
0.7000E+02	0.5071E+00	0.7000E+02	0.1521E+01
0.7500E+02	0.5487E+00	0.7500E+02	0.1704E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 165E THETA= 30.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6682E+00
0.1500E+02	0.6924E+00
0.2000E+02	0.6727E+00
0.2500E+02	0.8021E+00
0.3200E+02	0.8197E+00
0.3400E+02	0.7871E+00
0.3600E+02	0.8307E+00
0.3800E+02	0.8220E+00
0.4000E+02	0.7468E+00
0.4200E+02	0.7687E+00
0.4400E+02	0.7947E+00
0.4800E+02	0.7103E+00
0.5000E+02	0.7498E+00
0.5400E+02	0.3447E+01
0.5600E+02	0.3611E+01
0.5800E+02	0.3307E+01
0.6000E+02	0.3076E+01
0.6200E+02	0.1874E+01
0.6600E+02	0.7900E+00
0.6800E+02	0.7222E+00
0.7000E+02	0.5078E+00
0.7500E+02	0.6001E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2089E+01
0.1500E+02	0.2189E+01
0.2000E+02	0.2101E+01
0.2500E+02	0.2343E+01
0.3200E+02	0.2558E+01
0.3400E+02	0.2535E+01
0.3600E+02	0.2586E+01
0.3800E+02	0.2521E+01
0.4000E+02	0.2426E+01
0.4200E+02	0.2561E+01
0.4400E+02	0.2513E+01
0.4800E+02	0.2324E+01
0.5000E+02	0.2282E+01
0.5400E+02	0.1117E+02
0.5600E+02	0.1149E+02
0.5800E+02	0.1069E+02
0.6000E+02	0.9815E+01
0.6200E+02	0.5845E+01
0.6600E+02	0.2580E+01
0.6800E+02	0.2049E+01
0.7000E+02	0.1550E+01
0.7500E+02	0.1918E+01

TEST 47 RUN 165F THETA= 40.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6779E+00
0.1500E+02	0.7084E+00
0.2000E+02	0.6994E+00
0.2500E+02	0.8273E+00
0.3200E+02	0.8454E+00
0.3400E+02	0.8002E+00
0.3600E+02	0.8499E+00
0.3800E+02	0.8337E+00
0.4000E+02	0.7332E+00
0.4200E+02	0.7733E+00
0.4400E+02	0.8018E+00
0.4800E+02	0.7111E+00
0.5000E+02	0.7382E+00
0.5400E+02	0.2969E+01
0.5600E+02	0.3355E+01
0.5800E+02	0.3105E+01
0.6000E+02	0.2980E+01
0.6200E+02	0.1858E+01
0.6600E+02	0.8159E+00
0.6800E+02	0.7561E+00
0.7000E+02	0.5184E+00
0.7500E+02	0.6809E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2092E+01
0.1500E+02	0.2223E+01
0.2000E+02	0.2113E+01
0.2500E+02	0.2413E+01
0.3200E+02	0.2566E+01
0.3400E+02	0.2537E+01
0.3600E+02	0.2594E+01
0.3800E+02	0.2531E+01
0.4000E+02	0.2411E+01
0.4200E+02	0.2589E+01
0.4400E+02	0.2491E+01
0.4800E+02	0.2305E+01
0.5000E+02	0.2252E+01
0.5400E+02	0.9511E+01
0.5600E+02	0.1051E+02
0.5800E+02	0.9711E+01
0.6000E+02	0.9267E+01
0.6200E+02	0.5700E+01
0.6600E+02	0.2606E+01
0.6800E+02	0.2080E+01
0.7000E+02	0.1573E+01
0.7500E+02	0.2068E+01



# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 166A THETA= 50.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6788E+00
0.1500E+02	0.6660E+00
0.2000E+02	0.6981E+00
0.2500E+02	0.7621E+00
0.3200E+02	0.8463E+00
0.3400E+02	0.8306E+00
0.3600E+02	0.8443E+00
0.3800E+02	0.8212E+00
0.4000E+02	0.8184E+00
0.4200E+02	0.8403E+00
0.4400E+02	0.7812E+00
0.4800E+02	0.7563E+00
0.5000E+02	0.8133E+00
0.5400E+02	0.2265E+01
0.5600E+02	0.2936E+01
0.5800E+02	0.2899E+01
0.6000E+02	0.2787E+01
0.6200E+02	0.1809E+01
0.6600E+02	0.9046E+00
0.6800E+02	0.6891E+00
0.7000E+02	0.5532E+00
0.7500E+02	0.6607E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2105E+01
0.1500E+02	0.2217E+01
0.2000E+02	0.2077E+01
0.2500E+02	0.2337E+01
0.3200E+02	0.2548E+01
0.3400E+02	0.2580E+01
0.3600E+02	0.2621E+01
0.3800E+02	0.2548E+01
0.4000E+02	0.2527E+01
0.4200E+02	0.2582E+01
0.4400E+02	0.2507E+01
0.4800E+02	0.2294E+01
0.5000E+02	0.2338E+01
0.5400E+02	0.7196E+01
0.5600E+02	0.9374E+01
0.5800E+02	0.8789E+01
0.6000E+02	0.8592E+01
0.6200E+02	0.5554E+01
0.6600E+02	0.2723E+01
0.6800E+02	0.2085E+01
0.7000E+02	0.1662E+01
0.7500E+02	0.2070E+01

TEST 47 RUN 166B THETA= 60.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6744E+00
0.1500E+02	0.6797E+00
0.2000E+02	0.6890E+00
0.2500E+02	0.7609E+00
0.3200E+02	0.8221E+00
0.3400E+02	0.8344E+00
0.3600E+02	0.8398E+00
0.3800E+02	0.8041E+00
0.4000E+02	0.7807E+00
0.4200E+02	0.8202E+00
0.4400E+02	0.7615E+00
0.4800E+02	0.7450E+00
0.5000E+02	0.8377E+00
0.5400E+02	0.1462E+01
0.5600E+02	0.2365E+01
0.5800E+02	0.2526E+01
0.6000E+02	0.2422E+01
0.6200E+02	0.1691E+01
0.6600E+02	0.9002E+00
0.6800E+02	0.7179E+00
0.7000E+02	0.5892E+00
0.7500E+02	0.6693E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2098E+01
0.1500E+02	0.2222E+01
0.2000E+02	0.2116E+01
0.2500E+02	0.2289E+01
0.3200E+02	0.2563E+01
0.3400E+02	0.2603E+01
0.3600E+02	0.2644E+01
0.3800E+02	0.2545E+01
0.4000E+02	0.2502E+01
0.4200E+02	0.2523E+01
0.4400E+02	0.2495E+01
0.4800E+02	0.2272E+01
0.5000E+02	0.2286E+01
0.5400E+02	0.4460E+01
0.5600E+02	0.7706E+01
0.5800E+02	0.7804E+01
0.6000E+02	0.7568E+01
0.6200E+02	0.5247E+01
0.6600E+02	0.2683E+01
0.6800E+02	0.2137E+01
0.7000E+02	0.1736E+01
0.7500E+02	0.2002E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 166C THETA= 70.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6660E+00
0.1500E+02	0.6715E+00
0.2000E+02	0.7043E+00
0.2500E+02	0.7718E+00
0.3200E+02	0.7995E+00
0.3400E+02	0.8427E+00
0.3600E+02	0.8378E+00
0.3800E+02	0.8098E+00
0.4000E+02	0.7536E+00
0.4200E+02	0.7901E+00
0.4400E+02	0.7516E+00
0.4800E+02	0.7293E+00
0.5000E+02	0.8241E+00
0.5400E+02	0.9597E+00
0.5600E+02	0.1781E+01
0.5800E+02	0.2145E+01
0.6000E+02	0.2112E+01
0.6200E+02	0.1581E+01
0.6600E+02	0.8881E+00
0.6800E+02	0.7401E+00
0.7000E+02	0.6414E+00
0.7500E+02	0.6767E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2098E+01
0.1500E+02	0.2175E+01
0.2000E+02	0.2177E+01
0.2500E+02	0.2343E+01
0.3200E+02	0.2535E+01
0.3400E+02	0.2651E+01
0.3600E+02	0.2667E+01
0.3800E+02	0.2583E+01
0.4000E+02	0.2510E+01
0.4200E+02	0.2509E+01
0.4400E+02	0.2459E+01
0.4800E+02	0.2308E+01
0.5000E+02	0.2309E+01
0.5400E+02	0.3043E+01
0.5600E+02	0.5890E+01
0.5800E+02	0.6760E+01
0.6000E+02	0.6618E+01
0.6200E+02	0.4926E+01
0.6600E+02	0.2641E+01
0.6800E+02	0.2205E+01
0.7000E+02	0.2023E+01
0.7500E+02	0.2016E+01

TEST 47 RUN 167A THETA= 80.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.5615E+00
0.1500E+02	0.5526E+00
0.2000E+02	0.6113E+00
0.2500E+02	0.6146E+00
0.3200E+02	0.7371E+00
0.3400E+02	0.7640E+00
0.3600E+02	0.7373E+00
0.3800E+02	0.7139E+00
0.4000E+02	0.7145E+00
0.4200E+02	0.7021E+00
0.4400E+02	0.6624E+00
0.4800E+02	0.6894E+00
0.5000E+02	0.6021E+00
0.5400E+02	0.8702E+00
0.5600E+02	0.1119E+01
0.5800E+02	0.1657E+01
0.6000E+02	0.1777E+01
0.6200E+02	0.1398E+01
0.6600E+02	0.7898E+00
0.6800E+02	0.6695E+00
0.7000E+02	0.7123E+00
0.7500E+02	0.5808E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.1999E+01
0.1500E+02	0.2054E+01
0.2000E+02	0.2099E+01
0.2500E+02	0.2226E+01
0.3200E+02	0.2465E+01
0.3400E+02	0.2536E+01
0.3600E+02	0.2563E+01
0.3800E+02	0.2506E+01
0.4000E+02	0.2465E+01
0.4200E+02	0.2416E+01
0.4400E+02	0.2314E+01
0.4800E+02	0.2299E+01
0.5000E+02	0.2106E+01
0.5400E+02	0.3367E+01
0.5600E+02	0.3839E+01
0.5800E+02	0.5518E+01
0.6000E+02	0.5655E+01
0.6200E+02	0.4472E+01
0.6600E+02	0.2516E+01
0.6800E+02	0.2143E+01
0.7000E+02	0.2532E+01
0.7500E+02	0.1957E+01

# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 167B THETA= 90.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.5662E+00
0.1500E+02	0.5297E+00
0.2000E+02	0.6535E+00
0.2500E+02	0.6185E+00
0.3200E+02	0.7672E+00
0.3400E+02	0.7703E+00
0.3600E+02	0.7545E+00
0.3800E+02	0.7203E+00
0.4000E+02	0.7358E+00
0.4200E+02	0.7224E+00
0.4400E+02	0.6835E+00
0.4800E+02	0.7073E+00
0.5000E+02	0.6416E+00
0.5400E+02	0.1051E+01
0.5600E+02	0.7107E+00
0.5800E+02	0.1209E+01
0.6000E+02	0.1500E+01
0.6200E+02	0.1316E+01
0.6600E+02	0.8001E+00
0.6800E+02	0.7939E+00
0.7000E+02	0.8151E+00
0.7500E+02	0.6177E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.1970E+01
0.1500E+02	0.2010E+01
0.2000E+02	0.2090E+01
0.2500E+02	0.2151E+01
0.3200E+02	0.2453E+01
0.3400E+02	0.2453E+01
0.3600E+02	0.2523E+01
0.3800E+02	0.2473E+01
0.4000E+02	0.2438E+01
0.4200E+02	0.2383E+01
0.4400E+02	0.2246E+01
0.4800E+02	0.2287E+01
0.5000E+02	0.2087E+01
0.5400E+02	0.3731E+01
0.5600E+02	0.2350E+01
0.5800E+02	0.4021E+01
0.6000E+02	0.4613E+01
0.6200E+02	0.3928E+01
0.6600E+02	0.2465E+01
0.6800E+02	0.2505E+01
0.7000E+02	0.2868E+01
0.7500E+02	0.1989E+01

TEST 47 RUN 168A THETA= 100.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.5575E+00
0.1500E+02	0.5961E+00
0.2000E+02	0.5936E+00
0.2500E+02	0.6021E+00
0.3200E+02	0.7509E+00
0.3400E+02	0.7386E+00
0.3600E+02	0.7396E+00
0.3800E+02	0.7233E+00
0.4000E+02	0.7180E+00
0.4200E+02	0.6754E+00
0.4400E+02	0.6820E+00
0.4600E+02	0.8280E+00
0.4800E+02	0.6763E+00
0.5000E+02	0.8110E+00
0.5400E+02	0.1165E+01
0.5600E+02	0.6186E+00
0.5800E+02	0.6947E+00
0.6000E+02	0.1121E+01
0.6200E+02	0.1203E+01
0.6600E+02	0.8262E+00
0.6800E+02	0.1049E+01
0.7000E+02	0.9083E+00
0.7500E+02	0.6485E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.1992E+01
0.1500E+02	0.2085E+01
0.2000E+02	0.2038E+01
0.2500E+02	0.2100E+01
0.3200E+02	0.2499E+01
0.3400E+02	0.2437E+01
0.3600E+02	0.2543E+01
0.3800E+02	0.2500E+01
0.4000E+02	0.2485E+01
0.4200E+02	0.2347E+01
0.4400E+02	0.2279E+01
0.4600E+02	0.2522E+01
0.4800E+02	0.2256E+01
0.5000E+02	0.2415E+01
0.5400E+02	0.3885E+01
0.5600E+02	0.2201E+01
0.5800E+02	0.2410E+01
0.6000E+02	0.3574E+01
0.6200E+02	0.3543E+01
0.6600E+02	0.2525E+01
0.6800E+02	0.3423E+01
0.7000E+02	0.3062E+01
0.7500E+02	0.2102E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 168B THETA= 110.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.5563E+00	0.1000E+02	0.1995E+01
0.1500E+02	0.5823E+00	0.1500E+02	0.2056E+01
0.2000E+02	0.6083E+00	0.2000E+02	0.2054E+01
0.2500E+02	0.5945E+00	0.2500E+02	0.2065E+01
0.3200E+02	0.7399E+00	0.3200E+02	0.2520E+01
0.3400E+02	0.7557E+00	0.3400E+02	0.2493E+01
0.3600E+02	0.7362E+00	0.3600E+02	0.2541E+01
0.3800E+02	0.7141E+00	0.3800E+02	0.2492E+01
0.4000E+02	0.7215E+00	0.4000E+02	0.2512E+01
0.4200E+02	0.6877E+00	0.4200E+02	0.2373E+01
0.4400E+02	0.6747E+00	0.4400E+02	0.2350E+01
0.4600E+02	0.8819E+00	0.4600E+02	0.2544E+01
0.4800E+02	0.6998E+00	0.4800E+02	0.2303E+01
0.5000E+02	0.8767E+00	0.5000E+02	0.2457E+01
0.5400E+02	0.1116E+01	0.5400E+02	0.3781E+01
0.5600E+02	0.7753E+00	0.5600E+02	0.2888E+01
0.5800E+02	0.5033E+00	0.5800E+02	0.1542E+01
0.6000E+02	0.8080E+00	0.6000E+02	0.2674E+01
0.6200E+02	0.1045E+01	0.6200E+02	0.3174E+01
0.6600E+02	0.1133E+01	0.6600E+02	0.3520E+01
0.6800E+02	0.1123E+01	0.6800E+02	0.3618E+01
0.7000E+02	0.9440E+00	0.7000E+02	0.3140E+01
0.7500E+02	0.6867E+00	0.7500E+02	0.2187E+01

TEST 47 RUN 168C THETA= 120.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.5688E+00	0.1000E+02	0.1967E+01
0.1500E+02	0.5440E+00	0.1500E+02	0.1993E+01
0.2000E+02	0.6414E+00	0.2000E+02	0.2063E+01
0.2500E+02	0.6288E+00	0.2500E+02	0.2083E+01
0.3200E+02	0.7605E+00	0.3200E+02	0.2486E+01
0.3400E+02	0.7813E+00	0.3400E+02	0.2509E+01
0.3600E+02	0.7365E+00	0.3600E+02	0.2495E+01
0.3800E+02	0.7209E+00	0.3800E+02	0.2444E+01
0.4000E+02	0.7412E+00	0.4000E+02	0.2474E+01
0.4200E+02	0.7246E+00	0.4200E+02	0.2370E+01
0.4400E+02	0.6849E+00	0.4400E+02	0.2374E+01
0.4600E+02	0.9402E+00	0.4600E+02	0.2537E+01
0.4800E+02	0.7311E+00	0.4800E+02	0.2314E+01
0.5000E+02	0.9460E+00	0.5000E+02	0.2485E+01
0.5400E+02	0.1114E+01	0.5400E+02	0.3627E+01
0.5600E+02	0.1029E+01	0.5600E+02	0.3482E+01
0.5800E+02	0.5999E+00	0.5800E+02	0.1847E+01
0.6000E+02	0.8528E+00	0.6000E+02	0.1686E+01
0.6200E+02	0.1077E+01	0.6200E+02	0.2587E+01
0.6600E+02	0.1348E+01	0.6600E+02	0.4091E+01
0.6800E+02	0.1181E+01	0.6800E+02	0.3647E+01
0.7000E+02	0.9935E+00	0.7000E+02	0.3156E+01
0.7500E+02	0.7463E+00	0.7500E+02	0.2299E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 169A THETA= 130.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6461E+00
0.1500E+02	0.6513E+00
0.2000E+02	0.6929E+00
0.2500E+02	0.6710E+00
0.3200E+02	0.7788E+00
0.3400E+02	0.8208E+00
0.3600E+02	0.8102E+00
0.3800E+02	0.8019E+00
0.4000E+02	0.8147E+00
0.4200E+02	0.7981E+00
0.4400E+02	0.7728E+00
0.4600E+02	0.6339E+00
0.4800E+02	0.7552E+00
0.5000E+02	0.5967E+00
0.5400E+02	0.1193E+01
0.5600E+02	0.1220E+01
0.5800E+02	0.9091E+00
0.6000E+02	0.1081E+01
0.6200E+02	0.1513E+01
0.6600E+02	0.1479E+01
0.6800E+02	0.1308E+01
0.7000E+02	0.1111E+01
0.7500E+02	0.8757E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2062E+01
0.1500E+02	0.2065E+01
0.2000E+02	0.2137E+01
0.2500E+02	0.2259E+01
0.3200E+02	0.2439E+01
0.3400E+02	0.2566E+01
0.3600E+02	0.2561E+01
0.3800E+02	0.2530E+01
0.4000E+02	0.2535E+01
0.4200E+02	0.2486E+01
0.4400E+02	0.2506E+01
0.4600E+02	0.2356E+01
0.4800E+02	0.2375E+01
0.5000E+02	0.2260E+01
0.5400E+02	0.3616E+01
0.5600E+02	0.3846E+01
0.5800E+02	0.2840E+01
0.6000E+02	0.2452E+01
0.6200E+02	0.4061E+01
0.6600E+02	0.4325E+01
0.6800E+02	0.3876E+01
0.7000E+02	0.3425E+01
0.7500E+02	0.2640E+01

TEST 47 RUN 169B THETA= 140.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6510E+00
0.1500E+02	0.6032E+00
0.2000E+02	0.6820E+00
0.2500E+02	0.6660E+00
0.3200E+02	0.7590E+00
0.3400E+02	0.7988E+00
0.3600E+02	0.7747E+00
0.3800E+02	0.7809E+00
0.4000E+02	0.8013E+00
0.4200E+02	0.7665E+00
0.4400E+02	0.7495E+00
0.4600E+02	0.6731E+00
0.4800E+02	0.7458E+00
0.5000E+02	0.6291E+00
0.5400E+02	0.1090E+01
0.5600E+02	0.1200E+01
0.5800E+02	0.1271E+01
0.6000E+02	0.9775E+00
0.6200E+02	0.1516E+01
0.6600E+02	0.1550E+01
0.6800E+02	0.1376E+01
0.7000E+02	0.1170E+01
0.7500E+02	0.9521E+00

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2136E+01
0.1500E+02	0.2015E+01
0.2000E+02	0.2157E+01
0.2500E+02	0.2233E+01
0.3200E+02	0.2414E+01
0.3400E+02	0.2564E+01
0.3600E+02	0.2512E+01
0.3800E+02	0.2506E+01
0.4000E+02	0.2536E+01
0.4200E+02	0.2477E+01
0.4400E+02	0.2491E+01
0.4600E+02	0.2373E+01
0.4800E+02	0.2402E+01
0.5000E+02	0.2249E+01
0.5400E+02	0.3122E+01
0.5600E+02	0.3777E+01
0.5800E+02	0.3672E+01
0.6000E+02	0.2768E+01
0.6200E+02	0.4003E+01
0.6600E+02	0.4608E+01
0.6800E+02	0.4184E+01
0.7000E+02	0.3764E+01
0.7500E+02	0.3057E+01

# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 170A THETA= 150.0 DEG.

Po = 25 psi

Po = 80 psi

X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.6846E+00	0.1000E+02	0.2176E+01
0.1500E+02	0.6621E+00	0.1500E+02	0.2055E+01
0.2000E+02	0.6848E+00	0.2000E+02	0.2155E+01
0.2500E+02	0.7269E+00	0.2500E+02	0.2243E+01
0.3200E+02	0.7869E+00	0.3200E+02	0.2440E+01
0.3400E+02	0.8183E+00	0.3400E+02	0.2553E+01
0.3600E+02	0.8131E+00	0.3600E+02	0.2544E+01
0.3800E+02	0.8175E+00	0.3800E+02	0.2515E+01
0.4000E+02	0.8328E+00	0.4000E+02	0.2605E+01
0.4200E+02	0.7971E+00	0.4200E+02	0.2508E+01
0.4400E+02	0.7964E+00	0.4400E+02	0.2524E+01
0.4600E+02	0.9096E+00	0.4600E+02	0.2665E+01
0.4800E+02	0.7658E+00	0.4800E+02	0.2421E+01
0.5000E+02	0.9245E+00	0.5000E+02	0.2589E+01
0.5400E+02	0.1030E+01	0.5400E+02	0.2548E+01
0.5600E+02	0.1368E+01	0.5600E+02	0.3779E+01
0.5800E+02	0.1555E+01	0.5800E+02	0.4581E+01
0.6000E+02	0.1317E+01	0.6000E+02	0.4307E+01
0.6200E+02	0.1424E+01	0.6200E+02	0.3300E+01
0.6600E+02	0.1671E+01	0.6600E+02	0.4811E+01
0.6800E+02	0.1500E+01	0.6800E+02	0.4562E+01
0.7000E+02	0.1320E+01	0.7000E+02	0.4227E+01
0.7500E+02	0.1072E+01	0.7500E+02	0.3505E+01

TEST 47 RUN 170B THETA= 160.0 DEG.

Po = 25 psi

Po = 80 psi

X(cm)	P(psi)	X(cm)	P(psi)
0.1000E+02	0.6925E+00	0.1000E+02	0.2168E+01
0.1500E+02	0.6537E+00	0.1500E+02	0.2020E+01
0.2000E+02	0.6921E+00	0.2000E+02	0.2173E+01
0.2500E+02	0.7477E+00	0.2500E+02	0.2282E+01
0.3200E+02	0.8103E+00	0.3200E+02	0.2444E+01
0.3400E+02	0.8321E+00	0.3400E+02	0.2536E+01
0.3600E+02	0.8146E+00	0.3600E+02	0.2552E+01
0.3800E+02	0.8296E+00	0.3800E+02	0.2511E+01
0.4000E+02	0.8243E+00	0.4000E+02	0.2655E+01
0.4200E+02	0.8339E+00	0.4200E+02	0.2524E+01
0.4400E+02	0.7953E+00	0.4400E+02	0.2524E+01
0.4600E+02	0.1024E+01	0.4600E+02	0.2695E+01
0.4800E+02	0.7691E+00	0.4800E+02	0.2435E+01
0.5000E+02	0.1044E+01	0.5000E+02	0.2621E+01
0.5400E+02	0.8669E+00	0.5400E+02	0.2372E+01
0.5600E+02	0.1462E+01	0.5600E+02	0.3893E+01
0.5800E+02	0.1721E+01	0.5800E+02	0.5200E+01
0.6000E+02	0.1682E+01	0.6000E+02	0.5291E+01
0.6200E+02	0.1342E+01	0.6200E+02	0.4466E+01
0.6600E+02	0.1700E+01	0.6600E+02	0.4535E+01
0.6800E+02	0.1608E+01	0.6800E+02	0.4654E+01
0.7000E+02	0.1439E+01	0.7000E+02	0.4529E+01
0.7500E+02	0.1197E+01	0.7500E+02	0.3942E+01

# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 170C THETA= 170.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6771E+00
0.1500E+02	0.6134E+00
0.2000E+02	0.6921E+00
0.2500E+02	0.7477E+00
0.3200E+02	0.8173E+00
0.3400E+02	0.8217E+00
0.3600E+02	0.7925E+00
0.3800E+02	0.8262E+00
0.4000E+02	0.8021E+00
0.4200E+02	0.7971E+00
0.4400E+02	0.7782E+00
0.4600E+02	0.1004E+01
0.4800E+02	0.7558E+00
0.5000E+02	0.1018E+01
0.5400E+02	0.7711E+00
0.5600E+02	0.1525E+01
0.5800E+02	0.1766E+01
0.6000E+02	0.1832E+01
0.6200E+02	0.1825E+01
0.6600E+02	0.1714E+01
0.6800E+02	0.1665E+01
0.7000E+02	0.1536E+01
0.7500E+02	0.1343E+01

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2154E+01
0.1500E+02	0.1960E+01
0.2000E+02	0.2173E+01
0.2500E+02	0.2277E+01
0.3200E+02	0.2430E+01
0.3400E+02	0.2497E+01
0.3600E+02	0.2519E+01
0.3800E+02	0.2481E+01
0.4000E+02	0.2602E+01
0.4200E+02	0.2519E+01
0.4400E+02	0.2459E+01
0.4600E+02	0.2710E+01
0.4800E+02	0.2412E+01
0.5000E+02	0.2648E+01
0.5400E+02	0.2367E+01
0.5600E+02	0.4236E+01
0.5800E+02	0.5471E+01
0.6000E+02	0.5791E+01
0.6200E+02	0.5886E+01
0.6600E+02	0.4914E+01
0.6800E+02	0.4983E+01
0.7000E+02	0.4861E+01
0.7500E+02	0.4294E+01

TEST 47 RUN 171A THETA= 180.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.6885E+00
0.1500E+02	0.6215E+00
0.2000E+02	0.6725E+00
0.2500E+02	0.7290E+00
0.3200E+02	0.7784E+00
0.3400E+02	0.7943E+00
0.3600E+02	0.8170E+00
0.3800E+02	0.8324E+00
0.4000E+02	0.8156E+00
0.4200E+02	0.7928E+00
0.4400E+02	0.7869E+00
0.4600E+02	0.8269E+00
0.4800E+02	0.7633E+00
0.5000E+02	0.7951E+00
0.5400E+02	0.7654E+00
0.5600E+02	0.1550E+01
0.5800E+02	0.1752E+01
0.6000E+02	0.1877E+01
0.6200E+02	0.1907E+01
0.6600E+02	0.1679E+01
0.6800E+02	0.1654E+01
0.7000E+02	0.1559E+01
0.7500E+02	0.1405E+01

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2199E+01
0.1500E+02	0.2039E+01
0.2000E+02	0.2166E+01
0.2500E+02	0.2283E+01
0.3200E+02	0.2414E+01
0.3400E+02	0.2484E+01
0.3600E+02	0.2548E+01
0.3800E+02	0.2502E+01
0.4000E+02	0.2610E+01
0.4200E+02	0.2541E+01
0.4400E+02	0.2452E+01
0.4600E+02	0.2463E+01
0.4800E+02	0.2428E+01
0.5000E+02	0.2322E+01
0.5400E+02	0.2388E+01
0.5600E+02	0.4531E+01
0.5800E+02	0.5579E+01
0.6000E+02	0.6011E+01
0.6200E+02	0.6231E+01
0.6600E+02	0.5279E+01
0.6800E+02	0.5240E+01
0.7000E+02	0.5011E+01
0.7500E+02	0.4449E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 171B THETA= 190.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1000E+02	0.7104E+00
0.1500E+02	0.6385E+00
0.2000E+02	0.6692E+00
0.2500E+02	0.7562E+00
0.3200E+02	0.7943E+00
0.3400E+02	0.8071E+00
0.3600E+02	0.8329E+00
0.3800E+02	0.8270E+00
0.4000E+02	0.8110E+00
0.4200E+02	0.7738E+00
0.4400E+02	0.7847E+00
0.4600E+02	0.8430E+00
0.4800E+02	0.7697E+00
0.5000E+02	0.8181E+00
0.5400E+02	0.8227E+00
0.5600E+02	0.1538E+01
0.5800E+02	0.1766E+01
0.6000E+02	0.1817E+01
0.6200E+02	0.1574E+01
0.6600E+02	0.1608E+01
0.6800E+02	0.1650E+01
0.7000E+02	0.1542E+01
0.7500E+02	0.1334E+01

Po = 80 psi

X(cm)	P(psi)
0.1000E+02	0.2228E+01
0.1500E+02	0.2022E+01
0.2000E+02	0.2149E+01
0.2500E+02	0.2299E+01
0.3200E+02	0.2426E+01
0.3400E+02	0.2477E+01
0.3600E+02	0.2524E+01
0.3800E+02	0.2489E+01
0.4000E+02	0.2556E+01
0.4200E+02	0.2524E+01
0.4400E+02	0.2439E+01
0.4600E+02	0.2482E+01
0.4800E+02	0.2391E+01
0.5000E+02	0.2392E+01
0.5400E+02	0.2405E+01
0.5600E+02	0.4269E+01
0.5800E+02	0.5459E+01
0.6000E+02	0.5768E+01
0.6200E+02	0.5514E+01
0.6600E+02	0.4421E+01
0.6800E+02	0.4772E+01
0.7000E+02	0.4712E+01
0.7500E+02	0.4246E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 172C THETA= -10.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6889E+00
0.1800E+02	0.6797E+00
0.2300E+02	0.7165E+00
0.2800E+02	0.8083E+00
0.3500E+02	0.7918E+00
0.3700E+02	0.7745E+00
0.3900E+02	0.8628E+00
0.4100E+02	0.8242E+00
0.4300E+02	0.7873E+00
0.4500E+02	0.7917E+00
0.4700E+02	0.8045E+00
0.4900E+02	0.8052E+00
0.5100E+02	0.1479E+01
0.5300E+02	0.3810E+01
0.5700E+02	0.3832E+01
0.5900E+02	0.3807E+01
0.6100E+02	0.2309E+01
0.6300E+02	0.1436E+01
0.6500E+02	0.9751E+00
0.6900E+02	0.5050E+00
0.7100E+02	0.5098E+00
0.7300E+02	0.5358E+00
0.7800E+02	0.6091E+00
0.8300E+02	0.6097E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2171E+01
0.1800E+02	0.2037E+01
0.2300E+02	0.2247E+01
0.2800E+02	0.2402E+01
0.3500E+02	0.2463E+01
0.3700E+02	0.2478E+01
0.3900E+02	0.2545E+01
0.4100E+02	0.2598E+01
0.4300E+02	0.2501E+01
0.4500E+02	0.2513E+01
0.4700E+02	0.2499E+01
0.4900E+02	0.2436E+01
0.5100E+02	0.4555E+01
0.5300E+02	0.1247E+02
0.5700E+02	0.1219E+02
0.5900E+02	0.1176E+02
0.6100E+02	0.7403E+01
0.6300E+02	0.4474E+01
0.6500E+02	0.2966E+01
0.6900E+02	0.1609E+01
0.7100E+02	0.1448E+01
0.7300E+02	0.1481E+01
0.7800E+02	0.1911E+01
0.8300E+02	0.2059E+01



TEST 47 RUN 172B THETA= 0.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6915E+00
0.1800E+02	0.6858E+00
0.2300E+02	0.7092E+00
0.2800E+02	0.8083E+00
0.3500E+02	0.8027E+00
0.3700E+02	0.7871E+00
0.3900E+02	0.8671E+00
0.4100E+02	0.8303E+00
0.4300E+02	0.8003E+00
0.4500E+02	0.7923E+00
0.4700E+02	0.8077E+00
0.4900E+02	0.8553E+00
0.5100E+02	0.1505E+01
0.5300E+02	0.3875E+01
0.5700E+02	0.3843E+01
0.5900E+02	0.3820E+01
0.6100E+02	0.2328E+01
0.6300E+02	0.1440E+01
0.6500E+02	0.9780E+00
0.6900E+02	0.5115E+00
0.7100E+02	0.5098E+00
0.7300E+02	0.5588E+00
0.7800E+02	0.6134E+00
0.8300E+02	0.6221E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2164E+01
0.1800E+02	0.2042E+01
0.2300E+02	0.2231E+01
0.2800E+02	0.2370E+01
0.3500E+02	0.2471E+01
0.3700E+02	0.2450E+01
0.3900E+02	0.2525E+01
0.4100E+02	0.2572E+01
0.4300E+02	0.2535E+01
0.4500E+02	0.2486E+01
0.4700E+02	0.2506E+01
0.4900E+02	0.2404E+01
0.5100E+02	0.4562E+01
0.5300E+02	0.1264E+02
0.5700E+02	0.1223E+02
0.5900E+02	0.1196E+02
0.6100E+02	0.7337E+01
0.6300E+02	0.4447E+01
0.6500E+02	0.2945E+01
0.6900E+02	0.1609E+01
0.7100E+02	0.1439E+01
0.7300E+02	0.1453E+01
0.7800E+02	0.1887E+01
0.8300E+02	0.2084E+01

TEST 47 RUN 172D THETA= 10.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.7016E+00
0.1800E+02	0.7162E+00
0.2300E+02	0.7169E+00
0.2800E+02	0.8332E+00
0.3500E+02	0.8090E+00
0.3700E+02	0.7856E+00
0.3900E+02	0.8784E+00
0.4100E+02	0.8483E+00
0.4300E+02	0.7895E+00
0.4500E+02	0.8057E+00
0.4700E+02	0.8232E+00
0.4900E+02	0.8713E+00
0.5100E+02	0.1496E+01
0.5300E+02	0.3781E+01
0.5700E+02	0.3849E+01
0.5900E+02	0.3814E+01
0.6100E+02	0.2357E+01
0.6300E+02	0.1454E+01
0.6500E+02	0.9984E+00
0.6900E+02	0.5115E+00
0.7100E+02	0.5278E+00
0.7300E+02	0.5588E+00
0.7800E+02	0.6306E+00
0.8300E+02	0.6500E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2182E+01
0.1800E+02	0.2050E+01
0.2300E+02	0.2213E+01
0.2800E+02	0.2363E+01
0.3500E+02	0.2485E+01
0.3700E+02	0.2451E+01
0.3900E+02	0.2535E+01
0.4100E+02	0.2607E+01
0.4300E+02	0.2538E+01
0.4500E+02	0.2498E+01
0.4700E+02	0.2526E+01
0.4900E+02	0.2489E+01
0.5100E+02	0.4495E+01
0.5300E+02	0.1232E+02
0.5700E+02	0.1217E+02
0.5900E+02	0.1196E+02
0.6100E+02	0.7445E+01
0.6300E+02	0.4492E+01
0.6500E+02	0.2992E+01
0.6900E+02	0.1609E+01
0.7100E+02	0.1455E+01
0.7300E+02	0.1455E+01
0.7800E+02	0.1914E+01
0.8300E+02	0.2076E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 173A THETA= 20.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.7093E+00	0.1300E+02	0.2286E+01
0.1800E+02	0.6689E+00	0.1800E+02	0.2064E+01
0.2300E+02	0.7602E+00	0.2300E+02	0.2260E+01
0.2800E+02	0.8475E+00	0.2800E+02	0.2403E+01
0.3500E+02	0.8308E+00	0.3500E+02	0.2532E+01
0.3700E+02	0.8189E+00	0.3700E+02	0.2496E+01
0.3900E+02	0.8643E+00	0.3900E+02	0.2569E+01
0.4100E+02	0.8666E+00	0.4100E+02	0.2675E+01
0.4300E+02	0.8463E+00	0.4300E+02	0.2621E+01
0.4500E+02	0.8194E+00	0.4500E+02	0.2540E+01
0.4700E+02	0.8213E+00	0.4700E+02	0.2557E+01
0.4900E+02	0.8548E+00	0.4900E+02	0.2499E+01
0.5100E+02	0.1484E+01	0.5100E+02	0.4430E+01
0.5300E+02	0.3438E+01	0.5300E+02	0.1130E+02
0.5700E+02	0.3782E+01	0.5700E+02	0.1191E+02
0.5900E+02	0.3729E+01	0.5900E+02	0.1175E+02
0.6100E+02	0.2403E+01	0.6100E+02	0.7598E+01
0.6300E+02	0.1499E+01	0.6300E+02	0.4598E+01
0.6500E+02	0.1024E+01	0.6500E+02	0.3058E+01
0.6900E+02	0.5784E+00	0.6900E+02	0.1706E+01
0.7100E+02	0.5356E+00	0.7100E+02	0.1481E+01
0.7300E+02	0.5512E+00	0.7300E+02	0.1479E+01
0.7800E+02	0.6536E+00	0.7800E+02	0.1982E+01
0.8300E+02	0.7248E+00	0.8300E+02	0.2139E+01

TEST 47 RUN 173B THETA= 30.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.7170E+00	0.1300E+02	0.2237E+01
0.1800E+02	0.6535E+00	0.1800E+02	0.2102E+01
0.2300E+02	0.7548E+00	0.2300E+02	0.2283E+01
0.2800E+02	0.8518E+00	0.2800E+02	0.2403E+01
0.3500E+02	0.8326E+00	0.3500E+02	0.2514E+01
0.3700E+02	0.8141E+00	0.3700E+02	0.2530E+01
0.3900E+02	0.8600E+00	0.3900E+02	0.2600E+01
0.4100E+02	0.8725E+00	0.4100E+02	0.2684E+01
0.4300E+02	0.8309E+00	0.4300E+02	0.2612E+01
0.4500E+02	0.8044E+00	0.4500E+02	0.2577E+01
0.4700E+02	0.8170E+00	0.4700E+02	0.2550E+01
0.4900E+02	0.8546E+00	0.4900E+02	0.2499E+01
0.5100E+02	0.1434E+01	0.5100E+02	0.4337E+01
0.5300E+02	0.2844E+01	0.5300E+02	0.9360E+01
0.5700E+02	0.3504E+01	0.5700E+02	0.1116E+02
0.5900E+02	0.3465E+01	0.5900E+02	0.1061E+02
0.6100E+02	0.2323E+01	0.6100E+02	0.7392E+01
0.6300E+02	0.1469E+01	0.6300E+02	0.4552E+01
0.6500E+02	0.1022E+01	0.6500E+02	0.3074E+01
0.6900E+02	0.5883E+00	0.6900E+02	0.1742E+01
0.7100E+02	0.5278E+00	0.7100E+02	0.1528E+01
0.7300E+02	0.5452E+00	0.7300E+02	0.1487E+01
0.7800E+02	0.6684E+00	0.7800E+02	0.1978E+01
0.8300E+02	0.6970E+00	0.8300E+02	0.2154E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 173C THETA= 40.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.7221E+00	0.1300E+02	0.2235E+01
0.1800E+02	0.6489E+00	0.1800E+02	0.2141E+01
0.2300E+02	0.7520E+00	0.2300E+02	0.2313E+01
0.2800E+02	0.8173E+00	0.2800E+02	0.2360E+01
0.3500E+02	0.8356E+00	0.3500E+02	0.2515E+01
0.3700E+02	0.8220E+00	0.3700E+02	0.2552E+01
0.3900E+02	0.8542E+00	0.3900E+02	0.2600E+01
0.4100E+02	0.8810E+00	0.4100E+02	0.2611E+01
0.4300E+02	0.8268E+00	0.4300E+02	0.2647E+01
0.4500E+02	0.8173E+00	0.4500E+02	0.2588E+01
0.4700E+02	0.8151E+00	0.4700E+02	0.2485E+01
0.4900E+02	0.9001E+00	0.4900E+02	0.2466E+01
0.5100E+02	0.1358E+01	0.5100E+02	0.3948E+01
0.5300E+02	0.2092E+01	0.5300E+02	0.6599E+01
0.5700E+02	0.3302E+01	0.5700E+02	0.1055E+02
0.5900E+02	0.3205E+01	0.5900E+02	0.9663E+01
0.6100E+02	0.2296E+01	0.6100E+02	0.7311E+01
0.6300E+02	0.1493E+01	0.6300E+02	0.4573E+01
0.6500E+02	0.1048E+01	0.6500E+02	0.3149E+01
0.6900E+02	0.5999E+00	0.6900E+02	0.1814E+01
0.7100E+02	0.5392E+00	0.7100E+02	0.1566E+01
0.7300E+02	0.5479E+00	0.7300E+02	0.1551E+01
0.7800E+02	0.6575E+00	0.7800E+02	0.1980E+01
0.8300E+02	0.7149E+00	0.8300E+02	0.2167E+01

TEST 47 RUN 173D THETA= 50.0 DEG.

Po = 25 psi		Po = 80 psi	
X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.7214E+00	0.1300E+02	0.2170E+01
0.1800E+02	0.6892E+00	0.1800E+02	0.2132E+01
0.2300E+02	0.7707E+00	0.2300E+02	0.2326E+01
0.2800E+02	0.8014E+00	0.2800E+02	0.2386E+01
0.3500E+02	0.8395E+00	0.3500E+02	0.2558E+01
0.3700E+02	0.8310E+00	0.3700E+02	0.2571E+01
0.3900E+02	0.8559E+00	0.3900E+02	0.2619E+01
0.4100E+02	0.8762E+00	0.4100E+02	0.2592E+01
0.4300E+02	0.8315E+00	0.4300E+02	0.2641E+01
0.4500E+02	0.8093E+00	0.4500E+02	0.2541E+01
0.4700E+02	0.7998E+00	0.4700E+02	0.2440E+01
0.4900E+02	0.9332E+00	0.4900E+02	0.2409E+01
0.5100E+02	0.1292E+01	0.5100E+02	0.3513E+01
0.5300E+02	0.1401E+01	0.5300E+02	0.4166E+01
0.5700E+02	0.2926E+01	0.5700E+02	0.9363E+01
0.5900E+02	0.2860E+01	0.5900E+02	0.8593E+01
0.6100E+02	0.2177E+01	0.6100E+02	0.6889E+01
0.6300E+02	0.1457E+01	0.6300E+02	0.4444E+01
0.6500E+02	0.1056E+01	0.6500E+02	0.3130E+01
0.6900E+02	0.6223E+00	0.6900E+02	0.1875E+01
0.7100E+02	0.5677E+00	0.7100E+02	0.1627E+01
0.7300E+02	0.6030E+00	0.7300E+02	0.1785E+01
0.7800E+02	0.6543E+00	0.7800E+02	0.1980E+01
0.8300E+02	0.7037E+00	0.8300E+02	0.2144E+01

# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 173E THETA= 60.0 DEG.

Po = 25 psi

Po = 80 psi

X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.7043E+00	0.1300E+02	0.2149E+01
0.1800E+02	0.7082E+00	0.1800E+02	0.2209E+01
0.2300E+02	0.7651E+00	0.2300E+02	0.2260E+01
0.2800E+02	0.8070E+00	0.2800E+02	0.2403E+01
0.3500E+02	0.8499E+00	0.3500E+02	0.2594E+01
0.3700E+02	0.8400E+00	0.3700E+02	0.2599E+01
0.3900E+02	0.8634E+00	0.3900E+02	0.2647E+01
0.4100E+02	0.8620E+00	0.4100E+02	0.2603E+01
0.4300E+02	0.8369E+00	0.4300E+02	0.2633E+01
0.4500E+02	0.8082E+00	0.4500E+02	0.2519E+01
0.4700E+02	0.8015E+00	0.4700E+02	0.2462E+01
0.4900E+02	0.9086E+00	0.4900E+02	0.2455E+01
0.5100E+02	0.1076E+01	0.5100E+02	0.2507E+01
0.5300E+02	0.1170E+01	0.5300E+02	0.3843E+01
0.5700E+02	0.2619E+01	0.5700E+02	0.8273E+01
0.5900E+02	0.2555E+01	0.5900E+02	0.7664E+01
0.6100E+02	0.2091E+01	0.6100E+02	0.6533E+01
0.6300E+02	0.1439E+01	0.6300E+02	0.4383E+01
0.6500E+02	0.1081E+01	0.6500E+02	0.3130E+01
0.6900E+02	0.6566E+00	0.6900E+02	0.1954E+01
0.7100E+02	0.5962E+00	0.7100E+02	0.1738E+01
0.7300E+02	0.6722E+00	0.7300E+02	0.2032E+01
0.7800E+02	0.6484E+00	0.7800E+02	0.1930E+01
0.8300E+02	0.7003E+00	0.8300E+02	0.2113E+01

TEST 47 RUN 174A THETA= 60.0 DEG.

Po = 25 psi

Po = 80 psi

X(cm)	P(psi)	X(cm)	P(psi)
0.1300E+02	0.6367E+00	0.1300E+02	0.2058E+01
0.1800E+02	0.6471E+00	0.1800E+02	0.2116E+01
0.2300E+02	0.7115E+00	0.2300E+02	0.2202E+01
0.2800E+02	0.7119E+00	0.2800E+02	0.2293E+01
0.3500E+02	0.7530E+00	0.3500E+02	0.2510E+01
0.3700E+02	0.7731E+00	0.3700E+02	0.2505E+01
0.3900E+02	0.8007E+00	0.3900E+02	0.2555E+01
0.4100E+02	0.7791E+00	0.4100E+02	0.2473E+01
0.4300E+02	0.7670E+00	0.4300E+02	0.2520E+01
0.4500E+02	0.7514E+00	0.4500E+02	0.2406E+01
0.4700E+02	0.7157E+00	0.4700E+02	0.2323E+01
0.4900E+02	0.8284E+00	0.4900E+02	0.2375E+01
0.5100E+02	0.1124E+01	0.5100E+02	0.2690E+01
0.5300E+02	0.1079E+01	0.5300E+02	0.3610E+01
0.5700E+02	0.2493E+01	0.5700E+02	0.7997E+01
0.5900E+02	0.2459E+01	0.5900E+02	0.7485E+01
0.6100E+02	0.1987E+01	0.6100E+02	0.6308E+01
0.6300E+02	0.1334E+01	0.6300E+02	0.4243E+01
0.6500E+02	0.9999E+00	0.6500E+02	0.3006E+01
0.6700E+02	0.7334E+00	0.6700E+02	0.2297E+01
0.6900E+02	0.5866E+00	0.6900E+02	0.1861E+01
0.7100E+02	0.5418E+00	0.7100E+02	0.1677E+01
0.7300E+02	0.6153E+00	0.7300E+02	0.1999E+01
0.7800E+02	0.5675E+00	0.7800E+02	0.1850E+01
0.8300E+02	0.5982E+00	0.8300E+02	0.2019E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 174B THETA= 70.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6459E+00
0.1800E+02	0.6656E+00
0.2300E+02	0.7089E+00
0.2800E+02	0.7605E+00
0.3500E+02	0.7493E+00
0.3700E+02	0.7949E+00
0.3900E+02	0.8421E+00
0.4100E+02	0.7829E+00
0.4300E+02	0.7578E+00
0.4500E+02	0.7525E+00
0.4700E+02	0.7240E+00
0.4900E+02	0.8073E+00
0.5100E+02	0.9436E+00
0.5300E+02	0.1200E+01
0.5700E+02	0.2095E+01
0.5900E+02	0.2169E+01
0.6100E+02	0.1848E+01
0.6300E+02	0.1293E+01
0.6500E+02	0.9867E+00
0.6700E+02	0.7593E+00
0.6900E+02	0.6119E+00
0.7100E+02	0.6604E+00
0.7300E+02	0.6726E+00
0.7800E+02	0.5772E+00
0.8300E+02	0.5597E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2066E+01
0.1800E+02	0.2161E+01
0.2300E+02	0.2225E+01
0.2800E+02	0.2321E+01
0.3500E+02	0.2482E+01
0.3700E+02	0.2525E+01
0.3900E+02	0.2581E+01
0.4100E+02	0.2461E+01
0.4300E+02	0.2443E+01
0.4500E+02	0.2326E+01
0.4700E+02	0.2340E+01
0.4900E+02	0.2391E+01
0.5100E+02	0.2303E+01
0.5300E+02	0.3996E+01
0.5700E+02	0.6655E+01
0.5900E+02	0.6525E+01
0.6100E+02	0.5759E+01
0.6300E+02	0.3923E+01
0.6500E+02	0.2868E+01
0.6700E+02	0.2306E+01
0.6900E+02	0.1891E+01
0.7100E+02	0.2023E+01
0.7300E+02	0.2152E+01
0.7800E+02	0.1814E+01
0.8300E+02	0.2042E+01

TEST 47 RUN 174C THETA= 80.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6355E+00
0.1800E+02	0.6697E+00
0.2300E+02	0.6590E+00
0.2800E+02	0.7404E+00
0.3500E+02	0.7241E+00
0.3700E+02	0.7788E+00
0.3900E+02	0.8157E+00
0.4100E+02	0.7474E+00
0.4300E+02	0.7230E+00
0.4500E+02	0.7022E+00
0.4700E+02	0.7014E+00
0.4900E+02	0.8551E+00
0.5100E+02	0.7087E+00
0.5300E+02	0.1283E+01
0.5700E+02	0.1486E+01
0.5900E+02	0.1734E+01
0.6100E+02	0.1599E+01
0.6300E+02	0.1198E+01
0.6500E+02	0.9203E+00
0.6700E+02	0.7317E+00
0.6900E+02	0.6636E+00
0.7100E+02	0.7506E+00
0.7300E+02	0.7061E+00
0.7800E+02	0.5531E+00
0.8300E+02	0.5180E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2073E+01
0.1800E+02	0.2184E+01
0.2300E+02	0.2156E+01
0.2800E+02	0.2316E+01
0.3500E+02	0.2476E+01
0.3700E+02	0.2547E+01
0.3900E+02	0.2607E+01
0.4100E+02	0.2487E+01
0.4300E+02	0.2402E+01
0.4500E+02	0.2326E+01
0.4700E+02	0.2372E+01
0.4900E+02	0.2367E+01
0.5100E+02	0.2236E+01
0.5300E+02	0.4211E+01
0.5700E+02	0.4972E+01
0.5900E+02	0.5536E+01
0.6100E+02	0.5159E+01
0.6300E+02	0.3617E+01
0.6500E+02	0.2768E+01
0.6700E+02	0.2270E+01
0.6900E+02	0.2063E+01
0.7100E+02	0.2451E+01
0.7300E+02	0.2259E+01
0.7800E+02	0.1788E+01
0.8300E+02	0.2081E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 175A THETA= 90.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6889E+00
0.1800E+02	0.6706E+00
0.2300E+02	0.6970E+00
0.2800E+02	0.7675E+00
0.3500E+02	0.8454E+00
0.3700E+02	0.8335E+00
0.3900E+02	0.8340E+00
0.4100E+02	0.8027E+00
0.4300E+02	0.8040E+00
0.4500E+02	0.7994E+00
0.4700E+02	0.7870E+00
0.5100E+02	0.7937E+00
0.5300E+02	0.1357E+01
0.5700E+02	0.1021E+01
0.5900E+02	0.1467E+01
0.6100E+02	0.1479E+01
0.6300E+02	0.1207E+01
0.6500E+02	0.9529E+00
0.6700E+02	0.7809E+00
0.6900E+02	0.9472E+00
0.7100E+02	0.9133E+00
0.7300E+02	0.7750E+00
0.7800E+02	0.5879E+00
0.8300E+02	0.6520E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2128E+01
0.1800E+02	0.2156E+01
0.2300E+02	0.2201E+01
0.2800E+02	0.2363E+01
0.3500E+02	0.2558E+01
0.3700E+02	0.2622E+01
0.3900E+02	0.2625E+01
0.4100E+02	0.2545E+01
0.4300E+02	0.2421E+01
0.4500E+02	0.2475E+01
0.4700E+02	0.2440E+01
0.5100E+02	0.2365E+01
0.5300E+02	0.4184E+01
0.5700E+02	0.3237E+01
0.5900E+02	0.4506E+01
0.6100E+02	0.4514E+01
0.6300E+02	0.3406E+01
0.6500E+02	0.2695E+01
0.6700E+02	0.2248E+01
0.6900E+02	0.2846E+01
0.7100E+02	0.2739E+01
0.7300E+02	0.2425E+01
0.7800E+02	0.1745E+01
0.8300E+02	0.2178E+01

TEST 47 RUN 175B THETA= 100.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.7075E+00
0.1800E+02	0.6367E+00
0.2300E+02	0.6955E+00
0.2800E+02	0.7675E+00
0.3500E+02	0.8973E+00
0.3700E+02	0.8592E+00
0.3900E+02	0.8467E+00
0.4100E+02	0.8099E+00
0.4300E+02	0.8452E+00
0.4500E+02	0.8242E+00
0.4700E+02	0.7970E+00
0.5100E+02	0.8268E+00
0.5300E+02	0.1339E+01
0.5700E+02	0.6289E+00
0.5900E+02	0.1056E+01
0.6100E+02	0.1307E+01
0.6300E+02	0.1147E+01
0.6500E+02	0.9399E+00
0.6700E+02	0.9782E+00
0.6900E+02	0.1072E+01
0.7100E+02	0.9941E+00
0.7300E+02	0.8034E+00
0.7800E+02	0.6008E+00
0.8300E+02	0.6692E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2168E+01
0.1800E+02	0.2071E+01
0.2300E+02	0.2227E+01
0.2800E+02	0.2363E+01
0.3500E+02	0.2585E+01
0.3700E+02	0.2632E+01
0.3900E+02	0.2640E+01
0.4100E+02	0.2524E+01
0.4300E+02	0.2438E+01
0.4500E+02	0.2543E+01
0.4700E+02	0.2447E+01
0.5100E+02	0.2430E+01
0.5300E+02	0.4031E+01
0.5700E+02	0.1917E+01
0.5900E+02	0.3234E+01
0.6100E+02	0.3813E+01
0.6300E+02	0.3121E+01
0.6500E+02	0.2592E+01
0.6700E+02	0.2814E+01
0.6900E+02	0.3238E+01
0.7100E+02	0.2927E+01
0.7300E+02	0.2503E+01
0.7800E+02	0.1745E+01
0.8300E+02	0.2235E+01

# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 175C THETA= 110.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.7202E+00
0.1800E+02	0.6092E+00
0.2300E+02	0.6986E+00
0.2800E+02	0.7700E+00
0.3500E+02	0.9072E+00
0.3700E+02	0.8609E+00
0.3900E+02	0.8628E+00
0.4100E+02	0.8258E+00
0.4300E+02	0.8598E+00
0.4500E+02	0.8268E+00
0.4700E+02	0.8080E+00
0.5100E+02	0.8371E+00
0.5300E+02	0.1296E+01
0.5700E+02	0.6541E+00
0.5900E+02	0.7204E+00
0.6100E+02	0.1088E+01
0.6300E+02	0.1061E+01
0.6500E+02	0.9670E+00
0.6700E+02	0.1214E+01
0.6900E+02	0.1132E+01
0.7100E+02	0.1031E+01
0.7300E+02	0.8577E+00
0.7800E+02	0.6372E+00
0.8300E+02	0.7043E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2195E+01
0.1800E+02	0.2038E+01
0.2300E+02	0.2181E+01
0.2800E+02	0.2340E+01
0.3500E+02	0.2586E+01
0.3700E+02	0.2586E+01
0.3900E+02	0.2637E+01
0.4100E+02	0.2498E+01
0.4300E+02	0.2462E+01
0.4500E+02	0.2544E+01
0.4700E+02	0.2449E+01
0.5100E+02	0.2456E+01
0.5300E+02	0.3804E+01
0.5700E+02	0.1710E+01
0.5900E+02	0.2132E+01
0.6100E+02	0.3058E+01
0.6300E+02	0.2887E+01
0.6500E+02	0.2635E+01
0.6700E+02	0.3581E+01
0.6900E+02	0.3309E+01
0.7100E+02	0.2986E+01
0.7300E+02	0.2545E+01
0.7800E+02	0.1837E+01
0.8300E+02	0.2273E+01

TEST 47 RUN 175D THETA= 120.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.7121E+00
0.1800E+02	0.6141E+00
0.2300E+02	0.6899E+00
0.2800E+02	0.7560E+00
0.3500E+02	0.8973E+00
0.3700E+02	0.8507E+00
0.3900E+02	0.8524E+00
0.4100E+02	0.8330E+00
0.4300E+02	0.8580E+00
0.4500E+02	0.8180E+00
0.4700E+02	0.8055E+00
0.5100E+02	0.8213E+00
0.5300E+02	0.1217E+01
0.5700E+02	0.7655E+00
0.5900E+02	0.7501E+00
0.6100E+02	0.1093E+01
0.6300E+02	0.1162E+01
0.6500E+02	0.1350E+01
0.6700E+02	0.1295E+01
0.6900E+02	0.1155E+01
0.7100E+02	0.1051E+01
0.7300E+02	0.8941E+00
0.7800E+02	0.6915E+00
0.8300E+02	0.7035E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2211E+01
0.1800E+02	0.2017E+01
0.2300E+02	0.2152E+01
0.2800E+02	0.2356E+01
0.3500E+02	0.2592E+01
0.3700E+02	0.2580E+01
0.3900E+02	0.2651E+01
0.4100E+02	0.2514E+01
0.4300E+02	0.2534E+01
0.4500E+02	0.2550E+01
0.4700E+02	0.2474E+01
0.5100E+02	0.2489E+01
0.5300E+02	0.3368E+01
0.5700E+02	0.2607E+01
0.5900E+02	0.1444E+01
0.6100E+02	0.2216E+01
0.6300E+02	0.2970E+01
0.6500E+02	0.3952E+01
0.6700E+02	0.3769E+01
0.6900E+02	0.3387E+01
0.7100E+02	0.3064E+01
0.7300E+02	0.2633E+01
0.7800E+02	0.2068E+01
0.8300E+02	0.2310E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 176A THETA= 130.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6110E+00
0.1800E+02	0.5370E+00
0.2300E+02	0.6191E+00
0.2800E+02	0.7247E+00
0.3500E+02	0.7615E+00
0.3700E+02	0.7622E+00
0.3900E+02	0.7603E+00
0.4100E+02	0.7384E+00
0.4300E+02	0.7563E+00
0.4500E+02	0.7008E+00
0.4700E+02	0.7229E+00
0.5100E+02	0.6995E+00
0.5300E+02	0.9671E+00
0.5700E+02	0.9752E+00
0.5900E+02	0.7215E+00
0.6100E+02	0.1242E+01
0.6300E+02	0.1385E+01
0.6500E+02	0.1387E+01
0.6700E+02	0.1277E+01
0.6900E+02	0.1118E+01
0.7100E+02	0.1011E+01
0.7300E+02	0.8879E+00
0.7800E+02	0.6982E+00
0.8300E+02	0.6222E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2107E+01
0.1800E+02	0.1936E+01
0.2300E+02	0.2049E+01
0.2800E+02	0.2332E+01
0.3500E+02	0.2417E+01
0.3700E+02	0.2481E+01
0.3900E+02	0.2551E+01
0.4100E+02	0.2444E+01
0.4300E+02	0.2494E+01
0.4500E+02	0.2461E+01
0.4700E+02	0.2420E+01
0.5100E+02	0.2301E+01
0.5300E+02	0.2336E+01
0.5700E+02	0.3263E+01
0.5900E+02	0.1950E+01
0.6100E+02	0.3195E+01
0.6300E+02	0.4102E+01
0.6500E+02	0.4166E+01
0.6700E+02	0.3830E+01
0.6900E+02	0.3490E+01
0.7100E+02	0.3152E+01
0.7300E+02	0.2851E+01
0.7800E+02	0.2369E+01
0.8300E+02	0.2191E+01

TEST 47 RUN 176B THETA= 140.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6014E+00
0.1800E+02	0.5506E+00
0.2300E+02	0.6308E+00
0.2800E+02	0.7293E+00
0.3500E+02	0.7615E+00
0.3700E+02	0.7570E+00
0.3900E+02	0.7799E+00
0.4100E+02	0.7361E+00
0.4300E+02	0.7580E+00
0.4500E+02	0.7231E+00
0.4700E+02	0.7292E+00
0.5100E+02	0.7028E+00
0.5300E+02	0.7976E+00
0.5700E+02	0.1166E+01
0.5900E+02	0.8911E+00
0.6100E+02	0.1185E+01
0.6300E+02	0.1435E+01
0.6500E+02	0.1455E+01
0.6700E+02	0.1366E+01
0.6900E+02	0.1213E+01
0.7100E+02	0.1102E+01
0.7300E+02	0.9714E+00
0.7800E+02	0.7933E+00
0.8300E+02	0.6485E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2090E+01
0.1800E+02	0.1977E+01
0.2300E+02	0.2053E+01
0.2800E+02	0.2374E+01
0.3500E+02	0.2417E+01
0.3700E+02	0.2474E+01
0.3900E+02	0.2557E+01
0.4100E+02	0.2484E+01
0.4300E+02	0.2512E+01
0.4500E+02	0.2476E+01
0.4700E+02	0.2445E+01
0.5100E+02	0.2328E+01
0.5300E+02	0.2250E+01
0.5700E+02	0.3647E+01
0.5900E+02	0.3044E+01
0.6100E+02	0.2892E+01
0.6300E+02	0.4193E+01
0.6500E+02	0.4373E+01
0.6700E+02	0.4085E+01
0.6900E+02	0.3826E+01
0.7100E+02	0.3535E+01
0.7300E+02	0.3235E+01
0.7800E+02	0.2801E+01
0.8300E+02	0.2335E+01



# TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 176C THETA= 150.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6005E+00
0.1800E+02	0.5370E+00
0.2300E+02	0.6434E+00
0.2800E+02	0.7247E+00
0.3500E+02	0.7558E+00
0.3700E+02	0.7678E+00
0.3900E+02	0.8030E+00
0.4100E+02	0.7399E+00
0.4300E+02	0.7691E+00
0.4500E+02	0.7255E+00
0.4700E+02	0.7429E+00
0.5100E+02	0.6995E+00
0.5300E+02	0.7256E+00
0.5700E+02	0.1364E+01
0.5900E+02	0.1391E+01
0.6100E+02	0.1035E+01
0.6300E+02	0.1423E+01
0.6500E+02	0.1535E+01
0.6700E+02	0.1481E+01
0.6900E+02	0.1356E+01
0.7100E+02	0.1230E+01
0.7300E+02	0.1082E+01
0.7800E+02	0.9101E+00
0.8300E+02	0.7136E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2052E+01
0.1800E+02	0.1997E+01
0.2300E+02	0.2136E+01
0.2800E+02	0.2340E+01
0.3500E+02	0.2429E+01
0.3700E+02	0.2449E+01
0.3900E+02	0.2546E+01
0.4100E+02	0.2497E+01
0.4300E+02	0.2491E+01
0.4500E+02	0.2495E+01
0.4700E+02	0.2474E+01
0.5100E+02	0.2325E+01
0.5300E+02	0.2266E+01
0.5700E+02	0.4008E+01
0.5900E+02	0.4339E+01
0.6100E+02	0.3119E+01
0.6300E+02	0.3823E+01
0.6500E+02	0.4440E+01
0.6700E+02	0.4323E+01
0.6900E+02	0.4213E+01
0.7100E+02	0.3958E+01
0.7300E+02	0.3677E+01
0.7800E+02	0.3167E+01
0.8300E+02	0.2474E+01

TEST 47 RUN 177A THETA= 160.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6308E+00
0.1800E+02	0.6147E+00
0.2300E+02	0.6816E+00
0.2800E+02	0.7722E+00
0.3500E+02	0.7611E+00
0.3700E+02	0.7828E+00
0.3900E+02	0.8283E+00
0.4100E+02	0.7787E+00
0.4300E+02	0.8048E+00
0.4500E+02	0.7846E+00
0.4700E+02	0.7689E+00
0.4900E+02	0.8714E+00
0.5100E+02	0.7440E+00
0.5300E+02	0.7490E+00
0.5700E+02	0.1574E+01
0.5900E+02	0.1667E+01
0.6100E+02	0.1505E+01
0.6300E+02	0.1263E+01
0.6500E+02	0.1519E+01
0.6700E+02	0.1571E+01
0.6900E+02	0.1476E+01
0.7100E+02	0.1393E+01
0.7300E+02	0.1270E+01
0.7800E+02	0.1076E+01
0.8300E+02	0.7754E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2036E+01
0.1800E+02	0.2036E+01
0.2300E+02	0.2146E+01
0.2800E+02	0.2411E+01
0.3500E+02	0.2422E+01
0.3700E+02	0.2426E+01
0.3900E+02	0.2527E+01
0.4100E+02	0.2512E+01
0.4300E+02	0.2473E+01
0.4500E+02	0.2504E+01
0.4700E+02	0.2504E+01
0.4900E+02	0.2445E+01
0.5100E+02	0.2328E+01
0.5300E+02	0.2275E+01
0.5700E+02	0.4606E+01
0.5900E+02	0.5228E+01
0.6100E+02	0.5157E+01
0.6300E+02	0.3525E+01
0.6500E+02	0.3842E+01
0.6700E+02	0.4235E+01
0.6900E+02	0.4433E+01
0.7100E+02	0.4367E+01
0.7300E+02	0.4189E+01
0.7800E+02	0.3533E+01
0.8300E+02	0.2654E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 177B THETA= 170.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6119E+00
0.1800E+02	0.5841E+00
0.2300E+02	0.6709E+00
0.2800E+02	0.7556E+00
0.3500E+02	0.7368E+00
0.3700E+02	0.7594E+00
0.3900E+02	0.8029E+00
0.4100E+02	0.7639E+00
0.4300E+02	0.7834E+00
0.4500E+02	0.7712E+00
0.4700E+02	0.7470E+00
0.4900E+02	0.8589E+00
0.5100E+02	0.7268E+00
0.5300E+02	0.7309E+00
0.5700E+02	0.1585E+01
0.5900E+02	0.1714E+01
0.6100E+02	0.1755E+01
0.6300E+02	0.1516E+01
0.6500E+02	0.1516E+01
0.6700E+02	0.1595E+01
0.6900E+02	0.1545E+01
0.7100E+02	0.1515E+01
0.7300E+02	0.1415E+01
0.7800E+02	0.1178E+01
0.8300E+02	0.7814E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2017E+01
0.1800E+02	0.2056E+01
0.2300E+02	0.2143E+01
0.2800E+02	0.2470E+01
0.3500E+02	0.2400E+01
0.3700E+02	0.2434E+01
0.3900E+02	0.2512E+01
0.4100E+02	0.2522E+01
0.4300E+02	0.2467E+01
0.4500E+02	0.2516E+01
0.4700E+02	0.2512E+01
0.4900E+02	0.2524E+01
0.5100E+02	0.2338E+01
0.5300E+02	0.2274E+01
0.5700E+02	0.4967E+01
0.5900E+02	0.5586E+01
0.6100E+02	0.5794E+01
0.6300E+02	0.5412E+01
0.6500E+02	0.4509E+01
0.6700E+02	0.4646E+01
0.6900E+02	0.4805E+01
0.7100E+02	0.4823E+01
0.7300E+02	0.4642E+01
0.7800E+02	0.3790E+01
0.8300E+02	0.2714E+01

TEST 47 RUN 177C THETA= 180.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6147E+00
0.1800E+02	0.5896E+00
0.2300E+02	0.6929E+00
0.2800E+02	0.7652E+00
0.3500E+02	0.7311E+00
0.3700E+02	0.7735E+00
0.3900E+02	0.8002E+00
0.4100E+02	0.7718E+00
0.4300E+02	0.7767E+00
0.4500E+02	0.7818E+00
0.4700E+02	0.7531E+00
0.4900E+02	0.8952E+00
0.5100E+02	0.7322E+00
0.5300E+02	0.7422E+00
0.5700E+02	0.1617E+01
0.5900E+02	0.1759E+01
0.6100E+02	0.1881E+01
0.6300E+02	0.1725E+01
0.6500E+02	0.1611E+01
0.6700E+02	0.1639E+01
0.6900E+02	0.1576E+01
0.7100E+02	0.1543E+01
0.7300E+02	0.1461E+01
0.7800E+02	0.1196E+01
0.8300E+02	0.8309E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2006E+01
0.1800E+02	0.2018E+01
0.2300E+02	0.2143E+01
0.2800E+02	0.2402E+01
0.3500E+02	0.2373E+01
0.3700E+02	0.2420E+01
0.3900E+02	0.2479E+01
0.4100E+02	0.2528E+01
0.4300E+02	0.2463E+01
0.4500E+02	0.2483E+01
0.4700E+02	0.2492E+01
0.4900E+02	0.2404E+01
0.5100E+02	0.2334E+01
0.5300E+02	0.2248E+01
0.5700E+02	0.5096E+01
0.5900E+02	0.5709E+01
0.6100E+02	0.6070E+01
0.6300E+02	0.6038E+01
0.6500E+02	0.5241E+01
0.6700E+02	0.5131E+01
0.6900E+02	0.5068E+01
0.7100E+02	0.4987E+01
0.7300E+02	0.4733E+01
0.7800E+02	0.3834E+01
0.8300E+02	0.2929E+01

TABLE 2 - SURFACE PRESSURE

TEST 47 RUN 177D THETA= 190.0 DEG.

Po = 25 psi

X(cm)	P(psi)
0.1300E+02	0.6181E+00
0.1800E+02	0.5830E+00
0.2300E+02	0.7099E+00
0.2800E+02	0.7817E+00
0.3500E+02	0.7495E+00
0.3700E+02	0.7724E+00
0.3900E+02	0.8014E+00
0.4100E+02	0.7770E+00
0.4300E+02	0.7761E+00
0.4500E+02	0.7724E+00
0.4700E+02	0.7511E+00
0.4900E+02	0.8891E+00
0.5100E+02	0.7449E+00
0.5300E+02	0.7379E+00
0.5700E+02	0.1615E+01
0.5900E+02	0.1739E+01
0.6100E+02	0.1684E+01
0.6300E+02	0.1329E+01
0.6500E+02	0.1503E+01
0.6700E+02	0.1573E+01
0.6900E+02	0.1491E+01
0.7100E+02	0.1410E+01
0.7300E+02	0.1288E+01
0.7800E+02	0.1104E+01
0.8300E+02	0.8863E+00

Po = 80 psi

X(cm)	P(psi)
0.1300E+02	0.2003E+01
0.1800E+02	0.2056E+01
0.2300E+02	0.2172E+01
0.2800E+02	0.2292E+01
0.3500E+02	0.2367E+01
0.3700E+02	0.2425E+01
0.3900E+02	0.2482E+01
0.4100E+02	0.2517E+01
0.4300E+02	0.2481E+01
0.4500E+02	0.2458E+01
0.4700E+02	0.2478E+01
0.4900E+02	0.2493E+01
0.5100E+02	0.2347E+01
0.5300E+02	0.2247E+01
0.5700E+02	0.4988E+01
0.5900E+02	0.5573E+01
0.6100E+02	0.5653E+01
0.6300E+02	0.4642E+01
0.6500E+02	0.4118E+01
0.6700E+02	0.4551E+01
0.6900E+02	0.4635E+01
0.7100E+02	0.4587E+01
0.7300E+02	0.4339E+01
0.7800E+02	0.3674E+01
0.8300E+02	0.3115E+01

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 106	POINTS 63	PoNOM 25.0000	X(cm) 51.2900	Pref 14.6875
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.1305	0.0072	25.2068	291.7085	0.8497	
1.1900	0.0135	25.0921	290.1509	0.8402	
1.4874	0.0242	25.1085	289.1699	0.8308	
1.8606	0.0326	25.1085	288.3459	0.8308	
2.1202	0.0411	25.0921	287.7324	0.8308	
2.4555	0.0603	25.0594	286.5457	0.8213	
2.4961	0.0624	25.1085	286.2275	0.8355	
2.3906	0.0645	25.1085	286.6094	0.8497	
2.7314	0.0836	25.0921	285.7285	0.8308	
2.7638	0.0857	25.1085	285.5905	0.8213	
2.9585	0.1070	25.0594	284.9634	0.8308	
3.1532	0.1282	25.0758	284.4527	0.8213	
3.3276	0.1495	25.0594	283.8750	0.8213	
3.5101	0.1686	25.0594	283.7391	0.8213	
3.5020	0.1707	25.0594	283.5953	0.8355	
3.7535	0.2068	25.0594	283.1208	0.8402	
3.9753	0.2429	25.0758	282.6617	0.8402	
4.2078	0.2790	25.0594	282.3307	0.8213	
4.2403	0.2812	25.0594	282.1865	0.8355	
4.4188	0.3151	25.0594	282.0262	0.8355	
4.4836	0.3173	25.0594	282.0102	0.8213	
4.7108	0.3513	25.0594	281.3043	0.8355	
4.6946	0.3534	25.0594	281.4327	0.8213	
5.0353	0.4001	25.0594	281.1437	0.8213	
5.0191	0.4022	25.0840	281.1758	0.8355	
5.3598	0.4511	25.0349	280.6779	0.8213	
5.3598	0.4532	25.0594	280.6297	0.8213	
5.6843	0.5021	25.0594	280.5011	0.8213	
5.6681	0.5042	25.0267	280.4797	0.8308	
5.9871	0.5509	25.0430	280.1474	0.8213	
6.0088	0.5530	25.1085	279.9865	0.8213	
6.3333	0.6019	25.0594	279.5842	0.8497	
6.3170	0.6040	25.0103	279.7291	0.8497	
6.7105	0.6699	25.0471	279.3829	0.8355	
7.1364	0.7357	25.0594	279.1011	0.8213	
7.1283	0.7378	25.0594	279.0527	0.8213	
7.5015	0.8037	25.0430	279.0634	0.8402	
7.8908	0.8653	25.0594	278.6013	0.8213	
7.8746	0.8674	25.0267	278.5583	0.8402	
7.9785	0.8908	25.0299	278.2852	0.8383	
7.9801	0.8929	25.0349	278.1765	0.8261	
8.1613	0.9269	25.0267	277.8698	0.8213	
8.4263	1.0012	25.0103	277.7299	0.8213	
8.4479	1.0033	25.0267	277.8698	0.8402	
8.6210	1.0692	25.0349	277.5280	0.8213	
8.7345	1.1393	25.0103	277.4068	0.8497	
8.7102	1.1414	25.0349	277.5361	0.8213	
8.7670	1.2072	25.0103	277.2452	0.8213	
8.7670	1.2094	25.0430	277.1374	0.8402	
8.7800	1.2752	25.0398	276.9995	0.8327	
8.8035	1.3389	25.0349	276.8087	0.8213	
8.8048	1.4026	25.0267	276.6307	0.8308	
8.8157	1.4048	25.0103	276.5983	0.8497	
8.8157	1.4621	25.0103	276.3394	0.8213	
8.8157	1.4642	25.0594	276.4203	0.8355	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X51.2900)

TEST 47	RUN 106	POINTS 63	PoNOM 25.0000	X(cm) 51.2900	Pref 14.6875
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
8.8157	1.5322	25.0267	276.1667	0.8308	
8.8116	1.5938	25.0349	276.1208	0.8355	
8.8157	1.6427	25.0594	276.0804	0.8213	
8.7994	1.6490	25.0103	276.1775	0.8213	
8.8059	1.6512	25.0398	276.1192	0.8383	
8.8035	1.7085	25.0471	275.9103	0.8497	
8.8157	1.7552	25.0594	275.9508	0.8497	
8.7913	1.7574	25.0103	275.9670	0.8213	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 134	POINTS 127	PoNOM 25.0000	X(cm) 51.9250	Pref 14.7601
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.4183	0.0206	25.2794	295.2916	0.8344	
1.4345	0.0227	25.2467	295.0408	0.8249	
1.4345	0.0312	25.2549	294.5234	0.8202	
1.4345	0.0355	25.2794	294.3822	0.8344	
1.4670	0.0376	25.2303	293.9427	0.8344	
1.4995	0.0397	25.2303	293.8171	0.8344	
1.4833	0.0419	25.2303	293.9427	0.8344	
1.5482	0.0504	25.2139	293.5762	0.8249	
1.6133	0.0589	25.2303	293.3143	0.8202	
1.6457	0.0610	25.2303	293.0941	0.8344	
1.7107	0.0673	25.1812	292.5592	0.8344	
1.7026	0.0695	25.2058	292.5749	0.8344	
1.7973	0.0801	25.2139	292.1708	0.8344	
1.8975	0.0886	25.2303	291.9607	0.8202	
1.9219	0.0907	25.2303	291.8976	0.8628	
1.9868	0.0971	25.2303	291.7715	0.8344	
2.0600	0.0992	25.1812	291.6139	0.8344	
2.1168	0.1056	25.2303	291.4878	0.8344	
2.1818	0.1077	25.1812	291.3458	0.8486	
2.2549	0.1162	25.1812	291.0302	0.8486	
2.2955	0.1183	25.1812	290.9828	0.8344	
2.4417	0.1247	25.1812	290.4933	0.8344	
2.4417	0.1268	25.1812	290.4775	0.8344	
2.5879	0.1438	25.1812	290.2563	0.8344	
2.7991	0.1459	25.1812	290.2563	0.8344	
2.7341	0.1481	25.1812	290.2404	0.8344	
3.0265	0.1672	25.1812	289.8557	0.8344	
3.1240	0.1693	25.2303	289.7186	0.8344	
3.2539	0.1884	25.1812	289.5604	0.8344	
3.3920	0.1905	25.1320	289.1330	0.8344	
3.3352	0.1927	25.1812	289.4021	0.8059	
3.6438	0.2118	25.1320	288.6101	0.8344	
3.6167	0.2139	25.1648	288.7792	0.8154	
3.8062	0.2309	25.1812	288.6101	0.8059	
3.8875	0.2330	25.1812	288.5784	0.8344	
3.9200	0.2351	25.1812	288.4199	0.8059	
4.0743	0.2543	25.1812	288.3089	0.8344	
4.1636	0.2564	25.1812	288.0392	0.8344	
4.0987	0.2585	25.1320	288.3565	0.8344	
4.2773	0.2776	25.1812	287.9757	0.8344	
4.3478	0.2798	25.1648	287.8593	0.8344	
4.5373	0.2989	25.1812	287.5630	0.8344	
4.5318	0.3010	25.1484	287.6900	0.8059	
4.6672	0.3201	25.1812	287.4677	0.8059	
4.7322	0.3222	25.1566	287.3724	0.8202	
4.7160	0.3244	25.1812	287.4677	0.8344	
4.8784	0.3456	25.1484	287.1394	0.8344	
4.9271	0.3477	25.1812	287.0864	0.8344	
5.0896	0.3647	25.1812	286.9274	0.8344	
5.0408	0.3668	25.1320	286.8956	0.8344	
5.0396	0.3690	25.1812	286.8638	0.8344	
5.0733	0.3711	25.1812	286.9592	0.8344	
5.2845	0.4008	25.1812	286.6252	0.8344	
5.3333	0.4029	25.1812	286.6094	0.8344	
5.5282	0.4348	25.1812	286.5457	0.8059	
5.5769	0.4369	25.1812	286.4821	0.8486	
5.5932	0.4391	25.1320	286.5139	0.8344	
5.7881	0.4688	25.1320	286.4185	0.8344	
5.8287	0.4730	25.1320	286.1797	0.8344	
5.8206	0.4752	25.1812	286.3230	0.8344	
5.9830	0.5049	25.1320	285.9728	0.8344	

TABLE 3 - TOTAL PRESSURE WINDWARD (continued, X51.9250)

TEST 47	RUN 134	POINTS 127	PoNOM 25.0000	X(cm) 51.9250	Pref 14.7601
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
6.0480	0.5070	25.1566	285.8932	0.8344	
6.0643	0.5091	25.1320	285.8772	0.8344	
6.2105	0.5389	25.1812	285.8295	0.8344	
6.2754	0.5410	25.1812	285.5905	0.8344	
6.3079	0.5431	25.1320	285.5586	0.8344	
6.4379	0.5750	25.1320	285.4949	0.8059	
6.5083	0.5771	25.1320	285.4099	0.8344	
6.7059	0.6132	25.1320	285.1521	0.8273	
6.8927	0.6451	25.1320	284.9527	0.8344	
6.9252	0.6472	25.1320	284.8571	0.8344	
6.9009	0.6493	25.1320	284.8730	0.8202	
6.9740	0.6684	25.1320	284.8251	0.8344	
7.0389	0.6706	25.1320	284.6762	0.8154	
7.0714	0.6812	25.1320	284.5059	0.8059	
7.1202	0.6833	25.1156	284.6656	0.8344	
7.1851	0.6918	25.1320	284.4740	0.8344	
7.1581	0.6939	25.1320	284.4846	0.8249	
7.1851	0.7003	25.0829	284.3782	0.8344	
7.2176	0.7046	25.1156	284.1866	0.8344	
7.2610	0.7131	25.1320	284.0907	0.8344	
7.2826	0.7152	25.1320	283.9948	0.8344	
7.3313	0.7258	25.1320	283.9309	0.8344	
7.3313	0.7300	25.1320	283.8990	0.8344	
7.3313	0.7322	25.1320	283.7711	0.8344	
7.4938	0.7662	25.1320	283.7232	0.8344	
7.5425	0.7683	25.0829	283.6432	0.8628	
7.7699	0.8214	25.1320	283.7391	0.8344	
7.8268	0.8235	25.1320	283.6912	0.8202	
8.0136	0.8745	25.1320	283.5153	0.8344	
8.0867	0.8787	25.1075	283.4673	0.8344	
8.2979	0.9318	25.1075	283.3234	0.8344	
8.3385	0.9340	25.1320	283.3234	0.8344	
8.3385	0.9361	25.0829	283.3234	0.8344	
8.4847	0.9849	25.0829	283.1954	0.8344	
8.5172	0.9913	25.1156	283.2167	0.8249	
8.6472	1.0402	25.1320	283.1634	0.8059	
8.6715	1.0423	25.1075	283.1314	0.8202	
8.6634	1.0444	25.1320	283.0674	0.8344	
8.7771	1.0975	25.1320	283.0994	0.8344	
8.7771	1.0996	25.1320	282.8753	0.8059	
8.7771	1.1017	25.1320	283.0194	0.8202	
8.8421	1.1570	25.1320	282.8753	0.8059	
8.8583	1.1612	25.1320	282.7792	0.8344	
8.8665	1.1633	25.1075	282.8593	0.8344	
8.9396	1.2207	25.1320	282.7472	0.8344	
8.9314	1.2228	25.1320	282.7472	0.8344	
8.9233	1.2271	25.0829	282.7472	0.8344	
9.0370	1.2802	25.1075	282.7472	0.8344	
9.0289	1.2844	25.1075	282.7632	0.8344	
9.2157	1.3418	25.1320	282.6831	0.8344	
9.2374	1.3439	25.1320	282.6511	0.8249	
9.9142	1.4012	25.1320	282.5710	0.8344	
10.2473	1.4055	25.1075	282.5710	0.8202	
11.6931	1.4798	25.1320	282.3948	0.8344	
11.7662	1.4819	25.1075	282.3627	0.8344	
13.0820	1.5435	25.1320	282.3307	0.8344	
13.3743	1.5478	25.1320	282.1223	0.8202	
14.1541	1.6158	25.1156	281.9460	0.8344	
14.1703	1.6179	25.0829	281.8177	0.8344	
14.2678	1.6816	25.1320	282.1384	0.8344	
14.2678	1.6859	25.1320	282.0903	0.8202	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 105	POINTS 71	PoNOM 25.0000	X(cm) 52.5600	Pref 14.6652
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.4868	0.0093	25.0800	292.5697	0.7495	
1.4922	0.0157	25.0800	290.8250	0.7709	
1.5003	0.0242	25.0800	289.7819	0.7495	
1.5084	0.0263	25.0800	289.9400	0.7590	
1.5246	0.0326	25.0800	288.7369	0.7495	
1.5354	0.0348	25.0800	288.2718	0.7685	
1.5246	0.0369	25.0800	288.8003	0.7780	
1.5408	0.0411	25.1291	287.6900	0.7780	
1.5461	0.0433	25.0637	287.7218	0.7780	
1.5853	0.0518	25.0923	286.7604	0.7780	
1.6378	0.0581	25.0800	285.8135	0.7495	
1.6271	0.0603	25.0800	285.9515	0.7780	
1.6783	0.0666	25.0800	285.3036	0.7709	
1.8158	0.0879	25.0800	284.8571	0.7495	
1.8589	0.0900	25.0800	284.5379	0.7685	
2.1393	0.1112	25.0637	284.2079	0.7590	
2.4952	0.1304	25.0800	283.6112	0.7780	
2.5599	0.1325	25.0800	283.4833	0.7780	
2.9158	0.1516	25.0800	282.6190	0.7780	
2.8753	0.1537	25.0800	282.7151	0.7780	
3.4658	0.1877	25.0800	282.2986	0.7780	
3.4415	0.1898	25.1046	282.2025	0.7638	
3.9834	0.2238	25.0800	281.8819	0.7495	
3.9511	0.2259	25.0800	281.9460	0.7495	
4.4094	0.2620	25.0964	281.5504	0.7780	
4.8327	0.2982	25.0800	281.5450	0.7780	
4.8408	0.3003	25.0800	281.3685	0.7495	
5.1481	0.3300	25.0800	280.9510	0.7495	
5.1562	0.3343	25.0800	280.9671	0.7780	
5.4231	0.3704	25.0800	280.6940	0.7638	
5.4069	0.3725	25.1291	280.8546	0.7495	
5.7062	0.4213	25.0800	280.3082	0.7780	
5.6981	0.4235	25.0800	280.3082	0.7495	
5.9246	0.4723	25.0800	280.0938	0.7590	
6.1025	0.5212	25.0800	279.9221	0.7780	
6.1187	0.5233	25.0800	279.8900	0.7780	
6.3074	0.5743	25.0964	279.6647	0.7590	
6.5636	0.6253	25.0800	279.5520	0.7638	
6.5393	0.6274	25.0800	279.6968	0.7780	
6.8413	0.6741	25.0800	279.3749	0.7590	
7.1486	0.7293	25.0964	279.1064	0.7590	
7.1378	0.7315	25.0800	279.2782	0.7495	
7.4614	0.7782	25.0800	278.8593	0.7780	
7.4533	0.7803	25.0800	278.8915	0.7780	
7.7525	0.8292	25.1046	278.6336	0.7638	
7.7687	0.8313	25.0800	278.6658	0.7495	
8.0437	0.8823	25.0637	278.4938	0.7685	
8.2378	0.9205	25.0800	278.1819	0.7495	
8.2378	0.9226	25.0800	278.2142	0.7780	
8.2378	0.9247	25.0800	278.1173	0.8066	
8.4589	0.9757	25.0964	277.7838	0.7495	
14.0667	1.0309	25.0964	277.6115	0.7495	
14.3121	1.0840	25.1046	277.4068	0.7780	
14.3687	1.1393	25.1291	277.1159	0.7495	
14.3687	1.1414	25.0800	277.2452	0.7780	



**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X52.5600)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>105</b>	<b>POINTS</b> <b>71</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>52.5600</b>	<b>Pref</b> <b>14.6652</b>
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
14.3687	1.1924		25.1291	277.1159	0.7495
14.3687	1.1945		25.0800	277.0189	0.7780
14.3525	1.2561		25.0800	277.1482	0.7495
14.3687	1.2582		25.1291	276.8895	0.7780
14.3525	1.2603		25.0800	276.9542	0.7780
14.3418	1.3241		25.0964	277.0512	0.7780
14.3525	1.3984		25.1046	276.9380	0.7780
14.3525	1.4005		25.1291	277.0189	0.7780
14.3283	1.4706		25.0800	276.8249	0.7638
14.3040	1.5365		25.1291	276.6307	0.7780
14.3040	1.5386		25.0555	276.8249	0.7638
14.3202	1.6002		25.0800	276.3718	0.7495
14.2824	1.6618		25.0800	276.2854	0.7590
14.2932	1.7212		25.0964	276.1667	0.7685
14.2878	1.7234		25.0310	275.9184	0.7495
14.2878	1.7743		25.1291	275.9832	0.7495

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 107	POINTS 71	PoNOM 25.0000	X(cm) 52.5600	Pref 14.6935
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.4338	0.0106	24.9671	290.7220	0.8033	
1.4338	0.0169	24.9671	288.3881	0.8175	
1.4503	0.0191	24.9671	288.3246	0.8033	
1.4668	0.0254	24.9426	286.9910	0.7890	
1.4668	0.0276	24.9671	286.8956	0.8175	
1.4750	0.0339	24.9671	285.9409	0.8175	
1.4832	0.0361	24.9671	285.8772	0.8175	
1.5380	0.0531	24.9671	285.0804	0.7985	
1.6752	0.0722	24.9671	284.6336	0.8175	
1.8781	0.0934	24.9671	283.8563	0.8080	
2.2896	0.1147	24.9671	282.8752	0.8175	
2.1908	0.1168	24.9671	283.0034	0.8033	
2.7887	0.1465	24.9507	282.4375	0.7985	
2.8491	0.1486	24.9671	282.3948	0.8175	
3.3510	0.1784	24.9671	281.8818	0.8175	
3.9023	0.2124	24.9180	281.1116	0.7890	
3.8365	0.2145	24.9917	281.2883	0.8175	
4.2150	0.2463	24.9426	280.8064	0.8175	
4.2561	0.2485	24.9671	280.9189	0.8175	
4.5770	0.2846	24.9548	280.4610	0.8033	
4.8293	0.3164	24.9671	280.2975	0.7985	
5.0213	0.3483	24.9180	279.8900	0.8175	
5.0706	0.3504	24.9671	279.6969	0.8175	
5.2599	0.3823	24.9671	279.3748	0.8033	
5.3175	0.3844	24.9671	279.2138	0.8175	
5.4985	0.4163	24.9671	279.0204	0.7890	
5.5150	0.4184	24.9671	278.7465	0.8033	
5.6960	0.4502	24.9671	278.6658	0.8175	
5.6960	0.4524	25.0163	278.7625	0.8175	
5.9099	0.4970	24.9671	278.3863	0.8080	
6.1238	0.5416	24.9671	278.2465	0.8175	
6.1074	0.5437	24.9671	278.1496	0.8175	
6.4036	0.5883	24.9671	277.7945	0.8175	
6.3707	0.5904	24.9671	277.7622	0.8033	
6.6422	0.6393	24.9426	277.8107	0.8175	
6.9714	0.6966	24.9671	277.4553	0.8175	
6.9714	0.6988	24.9917	277.3583	0.8175	
7.3745	0.7604	25.0163	277.1805	0.7890	
7.3580	0.7625	24.9671	277.2883	0.8175	
7.7365	0.8220	25.0163	277.0836	0.7890	
7.7365	0.8241	24.9671	277.0189	0.7890	
7.7365	0.8262	24.9671	277.0189	0.7890	
8.0657	0.8857	24.9671	276.8788	0.8175	
8.2796	0.9239	24.9671	276.6954	0.8033	
8.2796	0.9260	24.9671	276.6954	0.7890	
8.4606	0.9600	24.9835	276.2314	0.8175	
8.4441	0.9621	24.9671	276.0479	0.8175	
8.6663	1.0301	24.9671	275.9184	0.8175	
8.6581	1.0322	24.9671	275.9832	0.7890	
8.7897	1.0938	24.9671	275.7726	0.8175	
8.8062	1.0960	24.9671	275.7888	0.8175	
14.3321	1.1597	24.9671	275.7304	0.8118	
14.5205	1.2234	24.9917	275.6673	0.7961	
14.5247	1.2871	24.9426	275.6105	0.8033	
14.5329	1.2892	25.0163	275.7240	0.8175	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X52.5600)

TEST 47	RUN 107	POINTS 71	PoNOM 25.0000	X(cm) 52.5600	Pref 14.6935
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
14.5164	1.3593	24.9671	275.3674	0.8175	
14.5219	1.3615	24.9671	275.4323	0.7985	
14.5109	1.4315	24.9507	275.1836	0.8175	
14.5164	1.4337	24.9671	275.2052	0.7890	
14.5000	1.5016	24.9671	275.0538	0.8080	
14.5000	1.5038	24.9671	274.8807	0.8175	
14.4726	1.5654	24.9671	275.1187	0.8080	
14.4671	1.6270	24.9671	275.0430	0.7890	
14.4588	1.6291	24.9671	275.0755	0.8033	
14.4506	1.6886	24.9917	274.6698	0.8175	
14.4506	1.6907	24.9671	274.7834	0.8175	
14.4506	1.7417	24.9671	274.5562	0.7890	
14.4451	1.7438	24.9671	274.5778	0.8080	
14.4342	1.7905	24.9671	274.6535	0.7890	
14.4301	1.7926	24.9671	274.5643	0.8033	
14.4342	1.8330	24.9671	274.3288	0.8175	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 146	POINTS 87	PoNOM 25.0000	X(cm) 53.1950	Pref 14.7665
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
4.5095	0.0116	23.1182	289.2517	3.8666	
4.5095	0.0159	23.4671	288.7686	3.8832	
4.5220	0.0180	23.5697	288.7052	3.8832	
4.5137	0.0201	23.6860	288.0921	3.8758	
4.5220	0.0286	23.7954	287.5630	3.8832	
4.5220	0.0307	23.7954	287.2930	3.8942	
4.5220	0.0350	23.7954	287.1182	3.8832	
4.5157	0.0371	23.7954	286.8956	3.8942	
4.5220	0.0668	23.7954	286.1002	3.8832	
4.5157	0.0690	23.7954	286.3071	3.8942	
4.5220	0.0987	23.7817	285.8878	3.8906	
4.5220	0.1284	23.7954	285.3992	3.8942	
4.5220	0.1306	23.7954	285.1122	3.8832	
4.5220	0.1561	23.7954	285.0804	3.8832	
4.5220	0.1582	23.7954	284.9527	3.8832	
4.5220	0.1603	23.7543	285.0485	3.9053	
4.5658	0.1900	23.7543	284.6017	3.8832	
4.5720	0.1922	23.7543	284.5379	3.8832	
4.6345	0.2198	23.7543	284.0268	3.8832	
4.6845	0.2219	23.7543	283.8990	3.8832	
4.7095	0.2240	23.7543	283.8350	3.8832	
4.8304	0.2538	23.7543	283.6646	3.8832	
4.8596	0.2559	23.7543	283.7072	3.8832	
5.0263	0.2877	23.7406	283.1953	3.8906	
5.2597	0.3196	23.7680	282.7259	3.8832	
5.5848	0.3706	23.7954	282.4589	3.8832	
5.7348	0.3748	23.7954	282.2666	3.8832	
6.1224	0.4279	23.7543	281.9139	3.8832	
6.4287	0.4301	25.0676	282.1223	3.9053	
7.4227	0.4853	26.1347	283.1314	3.9495	
7.5415	0.4874	25.3344	282.5709	3.9495	
7.7103	0.5384	24.0416	281.1116	3.9053	
7.8353	0.5405	23.7954	280.8707	3.8942	
8.3104	0.5978	23.5491	280.7582	3.8832	
8.5542	0.6000	23.5081	280.7261	3.8832	
9.2732	0.6531	23.4671	280.6618	3.8832	
9.4545	0.6573	23.4260	280.5493	3.8832	
10.4610	0.7104	23.4260	280.5976	3.8611	
10.6985	0.7125	23.4055	280.4690	3.8832	
11.8363	0.7699	23.4260	280.1796	3.8832	
12.2614	0.7720	23.4055	280.0670	3.8832	
13.7993	0.8272	23.4260	280.0187	3.8611	
14.1744	0.8294	23.3850	279.8578	3.8832	
14.0494	0.8315	23.3850	279.9221	3.8832	
15.0996	0.8846	23.3850	279.7934	3.8832	
15.2122	0.8867	23.4260	279.8256	3.8832	
15.2872	0.8888	23.3850	279.8900	3.8832	
15.4997	0.9334	23.4260	279.6968	3.8832	
15.5497	0.9356	23.4466	279.6325	3.8832	
15.4935	0.9717	23.5286	279.2460	3.8721	
15.5122	0.9738	23.4671	279.2138	3.8832	
15.3560	0.9929	23.6107	279.3427	3.8832	
15.2997	0.9950	23.6312	279.2782	3.8832	
15.3122	1.0078	23.6449	279.1923	3.8832	
15.1184	1.0205	23.6928	278.7142	3.8832	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X53.1950)

TEST 47	RUN 146	POINTS 87	PoNOM 25.0000	X(cm) 53.1950	Pref 14.7665
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
15.0496	1.0227	23.7133	278.6658	3.8832	
14.7996	1.0630	23.6928	278.7142	3.8832	
14.8371	1.0651	23.7133	278.6336	3.8832	
14.5620	1.1374	23.6723	278.5045	3.8832	
14.5245	1.1395	23.7133	278.4400	3.8832	
14.5370	1.1416	23.7133	278.3110	3.8832	
14.4307	1.2117	23.6928	278.1174	3.8832	
14.4245	1.2138	23.7133	278.1496	3.8832	
14.4120	1.2818	23.7133	278.0851	3.8832	
14.3995	1.2839	23.7133	277.9721	3.8832	
14.4120	1.3561	23.7133	277.9882	3.8832	
14.4120	1.3582	23.7133	277.8268	3.8832	
14.3995	1.3604	23.7133	277.7299	3.8832	
14.3995	1.4283	23.7133	277.6653	3.8832	
14.3870	1.4305	23.7133	277.5684	3.8832	
14.3995	1.4326	23.7133	277.6007	3.8832	
14.3870	1.5006	23.7133	277.5361	3.8832	
14.3744	1.5027	23.6723	277.3745	3.8832	
14.3870	1.5048	23.6723	277.4714	3.8832	
14.3619	1.5664	23.6723	277.5361	3.8832	
14.3619	1.5707	23.6928	277.4068	3.8832	
14.3619	1.6301	23.7133	277.0512	3.8832	
14.3556	1.6344	23.6928	277.0674	3.8942	
14.3494	1.6960	23.6723	277.0189	3.8832	
14.3494	1.6981	23.7133	276.9865	3.8832	
14.3494	1.7002	23.6723	277.0836	3.8832	
14.3494	1.7576	23.6723	276.8572	3.8832	
14.3369	1.7597	23.6928	276.8410	3.8832	
14.3244	1.8107	23.6723	276.8248	3.8832	
14.3119	1.8128	23.6723	276.8248	3.8832	
14.3244	1.8149	23.6723	276.7278	3.8832	
14.3119	1.8616	23.6723	276.6145	3.8832	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 104	POINTS 80	PoNOM 25.0000	X(cm) 53.8300	Pref 14.6699
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.1726	0.0135	25.1229	295.8552	0.7790	
2.1726	0.0157	25.1966	296.0272	0.7790	
2.1645	0.0199	25.1720	294.2253	0.7790	
2.1726	0.0220	25.1474	294.3509	0.7790	
2.1563	0.0284	25.0983	292.9054	0.7790	
2.1563	0.0305	25.1147	293.3037	0.7885	
2.1317	0.0390	25.0983	292.6064	0.7790	
2.1317	0.0411	25.0983	292.2601	0.7790	
2.1235	0.0454	25.0737	291.3773	0.7790	
2.1235	0.0475	25.0819	291.4457	0.7790	
2.1154	0.0560	25.0614	290.5328	0.7862	
2.1235	0.0581	25.0737	290.4933	0.7790	
2.1235	0.0751	25.0491	289.8135	0.7790	
2.1181	0.0773	25.0819	289.5815	0.7790	
2.1563	0.0985	25.0737	288.9429	0.7790	
2.1481	0.1006	25.0491	288.9429	0.7933	
2.2299	0.1176	25.0737	288.2613	0.7647	
2.2135	0.1197	25.0737	288.4516	0.7647	
2.4180	0.1495	25.0614	287.8726	0.7790	
2.6797	0.1813	25.0491	287.6900	0.8076	
2.8051	0.1835	25.0491	287.3724	0.7790	
3.2522	0.2174	25.0491	287.0864	0.7790	
3.4158	0.2196	25.0737	286.9274	0.7790	
4.0210	0.2535	25.0737	286.5457	0.7790	
4.0864	0.2557	25.0491	286.5298	0.7790	
4.8388	0.2897	25.0819	286.3654	0.7790	
4.5608	0.2918	25.0983	286.4821	0.7790	
5.4113	0.3215	25.0491	285.9409	0.7790	
5.4849	0.3236	25.0737	285.7020	0.7790	
5.2477	0.3258	25.0491	286.0683	0.8076	
6.0002	0.3576	25.0491	285.3673	0.7790	
5.9184	0.3597	25.0655	285.4630	0.7885	
6.4950	0.3916	25.0491	285.2398	0.7718	
7.0879	0.4298	25.0860	284.8012	0.7790	
7.6686	0.4638	25.0491	284.4420	0.7790	
7.7340	0.4659	25.0737	284.4261	0.7790	
8.4619	0.4999	25.0491	284.0587	0.7790	
8.3393	0.5021	25.0737	284.0428	0.7790	
9.2961	0.5339	25.0737	283.7391	0.7861	
10.2039	0.5700	25.0491	283.2114	0.7790	
10.0077	0.5722	25.0737	283.3394	0.7790	
11.2426	0.6061	25.0737	283.0994	0.7790	
11.0954	0.6083	25.0737	283.0514	0.7790	
12.4939	0.6550	25.0737	282.8273	0.7790	
12.6739	0.6571	25.0983	282.8753	0.7790	
14.2728	0.7038	25.0614	282.5070	0.7790	
15.4137	0.7548	25.0614	282.3147	0.7862	
16.3706	0.8037	25.0491	282.3307	0.7790	
16.2888	0.8058	25.0491	282.1704	0.7790	
16.3706	0.8079	25.0491	282.3307	0.7790	
16.8885	0.8525	25.0819	282.1170	0.7790	
16.9267	0.8546	25.0491	282.0422	0.7790	
17.2320	0.8992	25.0983	281.7429	0.7885	
17.1721	0.9014	25.0983	281.8819	0.7790	
17.2048	0.9205	25.0983	281.6252	0.7790	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X53.8300)

TEST 47	RUN 104	POINTS 80	PoNOM 25.0000	X(cm) 53.8300	Pref 14.6699
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
17.2048	0.9226	25.0632	281.5290	0.7872	
17.0944	0.9375	25.0614	280.9992	0.7790	
16.1129	0.9863	25.0491	280.7582	0.7790	
14.7567	1.0416	25.0819	280.5761	0.7790	
14.3014	1.0968	25.0737	280.5172	0.7790	
14.2932	1.0989	25.0491	280.5654	0.7790	
14.2878	1.1541	25.0655	280.2975	0.7695	
14.2823	1.2094	25.0983	280.0187	0.7981	
14.3014	1.2646	25.0491	279.8256	0.7933	
14.3096	1.2667	25.0491	279.7612	0.7790	
14.3096	1.3219	25.0819	279.8363	0.7790	
14.3341	1.3835	25.0737	279.6486	0.7790	
14.3423	1.3857	25.0983	279.7612	0.7790	
14.3150	1.4451	25.0655	279.3105	0.7885	
14.3750	1.5025	25.0491	279.1816	0.7790	
14.3668	1.5046	25.0737	279.0204	0.7790	
14.3259	1.5577	25.0819	279.0097	0.7790	
14.3259	1.5598	25.0983	279.0849	0.7790	
14.3259	1.6065	25.0983	279.1816	0.7504	
14.3177	1.6087	25.0983	279.1333	0.7790	
14.3382	1.6618	25.0737	278.8432	0.7790	
14.3423	1.7106	25.0491	278.9882	0.7790	
14.3423	1.7128	25.0983	278.9882	0.7885	
14.3259	1.7552	25.0491	279.0204	0.7790	
14.3341	1.7574	25.0983	278.8915	0.7790	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 145	POINTS 81	PoNOM 25.0000	X(cm) 54.4650	Pref 14.7665
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.3848	0.0180	26.2283	291.4247	0.7817	
3.3848	0.0222	26.2283	291.4878	0.7817	
3.3848	0.0265	26.2283	290.9828	0.7817	
3.3848	0.0286	26.2283	290.8408	0.7817	
3.3848	0.0371	26.2283	290.4143	0.7817	
3.3848	0.0392	26.2529	290.1614	0.7817	
3.3686	0.0477	26.2775	289.6870	0.7817	
3.3767	0.0499	26.2775	289.6554	0.7817	
3.3848	0.0562	26.2283	289.3705	0.7817	
3.3767	0.0583	26.2038	289.2755	0.7817	
3.3848	0.0647	26.1792	289.0221	0.7817	
3.3848	0.0690	26.2283	288.9270	0.7817	
3.3848	0.0753	26.1792	288.6736	0.7817	
3.3848	0.0775	26.2038	288.4358	0.7817	
3.3686	0.0838	26.2283	287.8805	0.7817	
3.3767	0.0902	26.2529	287.8964	0.7817	
3.3848	0.1242	26.2283	287.6265	0.8103	
3.3686	0.1263	26.1792	287.5948	0.7531	
3.3686	0.1284	26.2283	287.5630	0.7817	
3.3848	0.1603	26.2283	287.3724	0.7817	
3.3686	0.1624	26.2283	287.2612	0.7817	
3.3848	0.2007	26.2283	286.7207	0.7817	
3.3848	0.2028	26.2283	286.7367	0.7817	
3.3767	0.2368	26.2283	286.6730	0.7817	
3.3686	0.2389	26.2283	286.6730	0.7817	
3.3686	0.2729	26.2775	286.3548	0.7817	
3.3767	0.2771	26.2529	286.0684	0.7817	
3.3767	0.3111	26.2283	285.7816	0.7817	
3.3848	0.3132	26.2283	285.6861	0.7817	
3.3848	0.3472	26.2283	285.4949	0.7817	
3.3767	0.3515	26.2529	285.3674	0.7674	
3.3848	0.3854	26.2283	285.0165	0.7817	
3.3767	0.3876	26.2529	284.9846	0.7817	
3.4172	0.4513	26.2775	284.8889	0.7817	
3.4739	0.4534	26.2529	284.7293	0.7817	
5.0465	0.5193	26.2447	284.5272	0.7817	
9.0578	0.5851	26.2038	284.2824	0.7817	
9.0659	0.5872	26.2283	284.2824	0.7817	
12.5620	0.6509	26.2283	283.9789	0.7817	
13.4684	0.7104	26.2775	283.6752	0.7817	
13.5978	0.7125	26.2283	283.6432	0.7817	
13.6626	0.7147	26.2775	283.5473	0.7817	
14.0510	0.7805	26.2283	283.2914	0.7531	
14.2453	0.7826	26.2529	283.3234	0.7817	
14.7848	0.8506	26.1956	283.0887	0.7817	
15.1678	0.9101	26.2283	282.9393	0.7817	
15.2973	0.9122	26.1792	282.9073	0.7817	
15.3621	0.9143	26.2283	282.8753	0.7817	
15.5806	0.9313	26.2283	282.6991	0.7817	
15.6372	0.9334	26.2283	282.4108	0.7817	
15.6372	0.9356	26.2283	282.3628	0.7817	
15.6696	0.9398	26.2283	282.2986	0.7817	
15.7991	0.9547	26.2283	282.2025	0.7817	
15.8557	0.9611	26.2283	282.1384	0.7960	
16.2037	1.0163	26.1792	281.7536	0.7817	



**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X54.4650)

<b>TEST</b> 47	<b>RUN</b> 145	<b>POINTS</b> 81	<b>PoNOM</b> 25.0000	<b>X(cm)</b> 54.4650	<b>Pref</b> 14.7665
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
16.2523	1.0205		26.2283	281.7215	0.7531
16.6407	1.0758		26.2775	281.6252	0.7817
16.7216	1.0779		26.2775	281.4648	0.7817
17.1209	1.1416		26.2283	281.2829	0.7817
17.3691	1.2096		26.1792	281.1758	0.7817
17.4824	1.2138		26.2283	281.1437	0.7817
17.4662	1.2159		26.1792	281.0795	0.7817
17.4500	1.2797		26.1792	281.0795	0.7817
17.4176	1.2818		26.1792	281.0313	0.7817
17.1101	1.3476		26.2283	280.9189	0.7817
16.9159	1.3498		26.2775	281.0153	0.7817
16.3170	1.4135		26.2775	280.7261	0.7817
16.0904	1.4156		26.2283	280.6618	0.7817
15.6210	1.4793		26.2283	280.5654	0.7817
15.4268	1.4814		26.2283	280.4368	0.7817
15.2326	1.5409		26.2775	280.5011	0.7817
15.2164	1.5430		26.2775	280.4368	0.7817
15.1274	1.6025		26.2283	280.0992	0.7674
15.1193	1.6046		26.2283	280.0509	0.7817
15.0869	1.6535		26.2283	280.1152	0.7817
15.1031	1.6577		26.2283	280.1474	0.8103
15.1193	1.7130		26.2283	280.1152	0.7817
15.1355	1.7151		26.2283	280.0509	0.7817
15.1193	1.7172		26.2283	279.9865	0.7817
15.1597	1.7597		26.2283	279.8900	0.7817
15.1597	1.8085		26.2529	279.5359	0.7817

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 103	POINTS 73	PoNOM 25.0000	X(cm) 55.1000	Pref 14.6639
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
4.9811	0.0159	25.1504	299.2044	0.7892	
4.9973	0.0222	25.0604	298.1042	0.7751	
4.9972	0.0244	25.0358	298.1042	0.7892	
5.1021	0.0307	25.1095	297.2150	0.7751	
5.1264	0.0329	25.1340	297.1057	0.7892	
5.2071	0.0392	25.1340	296.5746	0.7892	
5.2717	0.0414	25.1340	296.2307	0.7892	
5.2394	0.0435	25.1340	296.4809	0.7609	
5.3605	0.0477	25.1340	295.7613	0.7892	
5.3685	0.0499	25.1340	295.7613	0.7892	
5.5058	0.0541	25.1095	294.9468	0.8034	
5.4896	0.0562	25.1340	295.0409	0.7751	
5.7076	0.0626	25.1340	293.5657	0.7892	
5.6995	0.0647	25.1340	293.7700	0.7892	
5.8367	0.0711	24.9376	292.9998	0.7609	
5.8770	0.0732	24.9867	292.9841	0.7892	
6.3211	0.0923	25.1340	292.5750	0.7892	
6.3533	0.0945	25.0849	292.6221	0.7892	
6.7892	0.1136	25.1340	292.1813	0.7609	
6.9749	0.1157	25.1340	292.0395	0.7892	
7.7094	0.1327	25.1340	291.4878	0.7609	
7.6233	0.1348	25.1340	291.5613	0.7892	
8.6135	0.1645	25.1340	291.3616	0.7892	
8.9848	0.1667	25.1013	291.0249	0.7798	
10.1714	0.2007	25.1095	290.6197	0.8034	
10.3732	0.2028	25.1340	290.5091	0.7892	
11.6109	0.2346	25.1340	289.9717	0.7892	
11.6486	0.2368	25.0849	290.0666	0.7892	
13.3720	0.2835	25.1340	289.7186	0.7892	
14.8774	0.3260	25.1340	289.3388	0.7892	
15.0550	0.3281	25.1504	289.1805	0.7892	
15.9268	0.3706	25.1340	288.9904	0.7892	
15.9645	0.3727	25.1340	288.8531	0.7892	
16.2093	0.4173	25.1340	288.6260	0.7892	
16.2012	0.4194	25.1340	288.6894	0.7892	
16.0398	0.4640	25.1340	288.1820	0.7892	
16.0318	0.4662	25.1340	288.1661	0.7751	
15.3940	0.5108	25.1340	287.9017	0.7703	
15.4586	0.5129	25.1340	288.0709	0.7609	
13.7796	0.5575	25.1340	287.4677	0.7892	
13.7043	0.5596	25.1176	287.4148	0.7892	
12.6818	0.6191	25.1340	287.1500	0.7892	
12.7141	0.6212	25.1586	287.1023	0.7892	
12.8594	0.6807	25.1340	286.7207	0.7892	
13.1715	0.7423	25.1340	286.4609	0.7703	
13.1823	0.7444	25.1340	286.4185	0.7892	
13.5967	0.8187	25.1340	286.2487	0.7703	
13.6343	0.8209	25.1340	286.0683	0.7892	
14.0541	0.8910	25.1340	285.8215	0.7892	
14.2720	0.9271	25.1340	285.4789	0.7892	
14.5787	0.9759	25.1340	284.9847	0.7751	
14.5707	0.9780	25.1340	284.8571	0.7892	
14.9797	1.0439	25.1340	284.7719	0.7798	
14.9743	1.0460	25.1340	284.9208	0.7892	
15.3537	1.1097	25.1586	284.6496	0.7751	

TABLE 3 - TOTAL PRESSURE WINDWARD (continued, X55.1000)

TEST 47	RUN 103	POINTS 73	PoNOM 25.0000	X(cm) 55.1000	Pref 14.6639
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
15.3617	1.1119	25.1340	284.6974	0.7892	
15.6846	1.1756	25.1340	284.3782	0.7892	
15.7008	1.1777	25.1340	284.4740	0.7892	
16.0075	1.2393	25.1340	284.2185	0.8176	
16.0318	1.2414	25.1340	284.1865	0.7892	
16.2981	1.3051	25.1340	283.7391	0.7609	
16.3088	1.3073	25.1340	284.0268	0.7892	
16.0479	1.3667	25.1586	283.8031	0.7751	
16.0398	1.3689	25.1586	283.7871	0.7892	
14.5021	1.4283	25.1708	283.5872	0.8034	
14.1779	1.4857	25.1340	283.3660	0.7798	
14.1832	1.4878	25.1340	283.5473	0.7892	
14.2478	1.5494	25.1340	283.1954	0.8034	
14.2317	1.5515	25.1340	283.2274	0.7892	
14.2155	1.6110	25.1340	282.9073	0.7892	
14.1832	1.6705	25.1586	282.7472	0.7892	
14.1832	1.6726	25.1340	282.8432	0.7892	
14.1994	1.7300	25.1340	282.5229	0.7892	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 102	POINTS 68	PoNOM 25.0000	X(cm) 56.3700	Pref 14.6571
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
6.9353	0.0180	25.0466	286.8002	0.7097	
6.9407	0.0222	25.0793	286.7367	0.7383	
7.1850	0.0286	25.0466	285.5267	0.7192	
7.0547	0.0307	25.0302	285.9091	0.7097	
7.3478	0.0350	25.0302	285.2079	0.7097	
7.4944	0.0371	25.0793	284.4900	0.7097	
7.4455	0.0392	25.0302	284.8889	0.7097	
7.7440	0.0435	25.0629	284.1333	0.7192	
7.6246	0.0456	25.0302	284.2504	0.7383	
7.9177	0.0499	25.0793	283.6432	0.7097	
8.0155	0.0520	25.0548	283.3713	0.6953	
8.2678	0.0605	25.0425	282.9954	0.7097	
8.5908	0.0668	25.0466	282.3841	0.7097	
8.6179	0.0690	25.0302	282.3628	0.7097	
9.2312	0.0881	25.0629	281.8498	0.7192	
10.2300	0.1093	25.0302	280.9832	0.7097	
10.1322	0.1114	25.0302	281.3364	0.7097	
11.1296	0.1306	25.0548	280.7100	0.7159	
12.8407	0.1667	25.0466	280.5226	0.7192	
14.7241	0.2028	25.0302	279.9543	0.7097	
14.4962	0.2049	25.0302	279.9543	0.7097	
14.7567	0.2070	25.0302	279.7291	0.7383	
16.1000	0.2410	25.0302	279.5359	0.7097	
16.1570	0.2431	25.0302	279.4393	0.7097	
16.9604	0.2792	25.0629	279.2245	0.7097	
17.2806	0.3132	25.0302	278.9398	0.7097	
17.2969	0.3154	25.0302	279.1171	0.6524	
17.3620	0.3515	25.0548	278.8915	0.7097	
17.3620	0.3536	25.0302	278.9560	0.7097	
17.3566	0.3876	25.0466	278.4400	0.7192	
17.3457	0.3897	25.0302	278.3755	0.7097	
17.4109	0.4385	25.0302	278.2465	0.7383	
17.4028	0.4407	25.0548	278.1335	0.7240	
17.3457	0.4895	25.0302	277.7622	0.7097	
17.3294	0.4916	25.0302	277.7784	0.7097	
17.2209	0.5532	25.0302	277.6223	0.7097	
17.1015	0.6191	25.0302	277.3422	0.7383	
17.0852	0.6212	25.0302	277.4068	0.7097	
17.0852	0.6233	25.0302	277.4068	0.7097	
17.0255	0.6871	25.0302	277.1698	0.7097	
16.8789	0.7487	25.0629	277.0728	0.7001	
16.5750	0.8124	25.0302	276.7602	0.7192	
13.9832	0.8803	25.0548	276.5013	0.7240	
14.5287	0.8825	25.0302	276.5013	0.7097	
13.5029	0.9398	25.0302	276.2746	0.7097	
13.5111	0.9419	25.0302	276.3394	0.7097	
13.6575	0.9908	25.0302	276.1775	0.7240	
13.6494	0.9929	25.0302	276.1451	0.7383	
13.9588	1.0566	25.0302	276.0479	0.7097	
13.9507	1.0588	25.0548	275.9832	0.7097	
14.2193	1.1246	25.0629	275.8536	0.7097	
14.4799	1.1883	25.0302	275.4971	0.7097	
14.5124	1.1905	25.0302	275.5295	0.7097	
14.7513	1.2542	25.0466	275.3782	0.7097	
14.9847	1.3200	25.0793	275.0754	0.7097	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X56.3700)

TEST 47	RUN 102	POINTS 68	PoNOM 25.0000	X(cm) 56.3700	Pref 14.6571
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
14.9928	1.3221	25.0302	275.0917	0.7097	
15.2289	1.3859	25.0548	275.1728	0.7097	
15.2452	1.3880	25.0302	275.1404	0.7097	
15.4488	1.4453	25.0302	274.9619	0.7240	
15.4406	1.4475	25.0302	274.9457	0.7383	
15.6523	1.5048	25.0548	274.7022	0.7097	
15.6523	1.5069	25.0302	274.7834	0.7383	
15.8639	1.5622	25.0302	274.5129	0.7192	
15.8639	1.5643	25.0793	274.6860	0.7097	
16.0431	1.6153	25.0302	274.4587	0.7097	
16.0431	1.6174	25.0548	274.4588	0.7097	
15.8531	1.6705	25.0302	274.2963	0.7192	
14.7675	1.7236	25.0302	274.4046	0.7192	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 101	POINTS 81	PoNOM 25.0000	X(cm) 57.6400	Pref 14.6375
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
7.7791	0.0137	25.1825	288.9587	0.5922	
7.7791	0.0159	25.1579	288.9269	0.5922	
8.1095	0.0222	25.1579	288.2930	0.5922	
8.2968	0.0244	25.1415	287.7535	0.5922	
8.8695	0.0307	25.1088	286.9274	0.5922	
8.7869	0.0329	25.1252	287.0970	0.5922	
9.3197	0.0414	25.1088	286.1479	0.5922	
9.1338	0.0435	25.1088	286.6412	0.5922	
9.6129	0.0456	25.1088	285.5267	0.5922	
9.7038	0.0477	25.0965	285.1201	0.5922	
10.0920	0.0562	25.1088	284.4740	0.5922	
10.0865	0.0583	25.1088	284.4846	0.5922	
10.5711	0.0647	25.1088	284.2185	0.5922	
10.5216	0.0668	25.0761	284.2504	0.5922	
11.1824	0.0817	25.0761	283.3980	0.5922	
11.2650	0.0838	25.0105	283.1314	0.5922	
11.6119	0.0881	25.0597	282.7792	0.5632	
11.6119	0.0902	25.0433	282.6617	0.5922	
11.9919	0.0987	25.0597	282.2346	0.6068	
12.0415	0.1008	25.0597	282.2025	0.5922	
13.4788	0.1306	25.0351	281.6814	0.5922	
15.1721	0.1624	25.0351	281.2882	0.5922	
15.0564	0.1645	25.0351	281.3685	0.5922	
16.4085	0.1985	25.0269	280.5975	0.5922	
16.2708	0.2007	25.0105	280.9189	0.5922	
17.1877	0.2325	25.0105	280.3323	0.5922	
17.6089	0.2665	25.0105	279.7612	0.5922	
17.6007	0.2686	25.0105	279.8095	0.5922	
17.5924	0.2707	25.0105	279.8256	0.5922	
17.7742	0.3005	25.0105	279.6325	0.5922	
17.7576	0.3026	25.0105	279.6325	0.5922	
17.8237	0.3323	25.0105	279.1494	0.5922	
17.8182	0.3345	25.0269	279.2245	0.5922	
17.8403	0.3663	25.0105	279.0043	0.5922	
17.8402	0.3685	25.0105	279.0688	0.5922	
17.8237	0.4131	25.0269	278.7411	0.5922	
17.8237	0.4152	25.0105	278.6658	0.5922	
17.7962	0.4598	25.0105	278.5368	0.5922	
17.8072	0.4619	25.0105	278.2949	0.5922	
17.7797	0.5065	24.9778	278.2035	0.5922	
17.7907	0.5086	24.9614	278.0528	0.5922	
17.7411	0.5766	25.0105	277.8914	0.5922	
17.7301	0.5787	24.9941	277.9560	0.5922	
17.6695	0.6509	25.0105	277.6438	0.5922	
17.6585	0.6531	25.0105	277.6976	0.5922	
17.6089	0.7232	25.0105	277.4068	0.5922	
17.6007	0.7253	24.9860	277.3584	0.5922	
17.6089	0.7274	24.9614	277.4391	0.5922	
17.5429	0.7996	24.9778	277.1051	0.5922	
17.5594	0.8018	24.9614	277.1159	0.5922	
17.4768	0.8697	25.0105	276.6954	0.5922	
17.4933	0.8718	24.9941	276.8464	0.5922	
17.4658	0.9377	24.9778	276.5552	0.5922	
17.4768	0.9398	24.9614	276.5660	0.5922	
17.4603	0.9483	24.9860	276.5175	0.5922	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X57.6400)

<b>TEST</b> 47	<b>RUN</b> 101	<b>POINTS</b> 81	<b>PoNOM</b> 25.0000	<b>X(cm)</b> 57.6400	<b>Pref</b> 14.6375
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
17.4025	1.0227		24.9860	276.0966	0.5922
17.4107	1.0248		24.9614	276.0642	0.5922
17.3281	1.0842		24.9614	275.9832	0.5922
17.3281	1.0864		24.9614	276.0156	0.5922
17.2455	1.1501		24.9614	275.9508	0.5922
17.2345	1.1522		24.9614	275.8536	0.5922
16.4608	1.2159		24.9614	275.7807	0.5922
14.2222	1.2797		24.9614	275.9508	0.5922
14.3214	1.2818		24.9368	275.9184	0.5922
14.2057	1.2839		24.9614	275.7888	0.5922
14.3048	1.3413		24.9614	275.6916	0.5922
14.3048	1.3434		24.9368	275.6754	0.5922
14.3048	1.3455		25.0105	275.6916	0.5922
14.5030	1.4050		24.9614	275.4647	0.5922
14.5085	1.4071		24.9614	275.5187	0.5922
14.7013	1.4666		24.9614	275.5619	0.5922
14.7013	1.4687		24.9614	275.5943	0.5922
14.8555	1.5260		24.9614	275.3890	0.5922
14.8500	1.5282		24.9123	275.3349	0.5922
15.0317	1.5791		24.9614	275.4647	0.5922
15.0317	1.5813		24.9614	275.3998	0.5922
15.0152	1.5834		24.9614	275.4647	0.5922
15.1680	1.6322		24.9491	275.3106	0.5922
15.2960	1.6853		24.9368	275.0754	0.5922
15.3126	1.6875		24.9614	275.0268	0.5922
15.4392	1.7342		24.9614	274.8591	0.5922

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 100	POINTS 73	PoNOM 25.0000	X(cm) 58.9100	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
9.4776	0.0244	25.2229	292.8578	0.8186	
9.4695	0.0265	25.2106	293.3457	0.8257	
10.2473	0.0329	25.2598	290.5091	0.8257	
10.1339	0.0350	25.2598	291.0985	0.8257	
10.9279	0.0435	25.2352	289.4813	0.8257	
10.8550	0.0456	25.2598	289.5762	0.8257	
11.4086	0.0520	25.2270	288.4939	0.8257	
11.4626	0.0541	25.2598	288.4833	0.8257	
11.8596	0.0605	25.2229	287.7456	0.8257	
12.2944	0.0668	25.2270	287.0122	0.8257	
12.3214	0.0690	25.2106	287.0228	0.8257	
12.6334	0.0732	25.2229	286.2354	0.8257	
12.6779	0.0753	25.2106	286.2275	0.8257	
13.3423	0.0923	25.2106	285.2079	0.8257	
13.3828	0.0945	25.2106	285.1601	0.8257	
14.1038	0.1093	25.2106	284.6336	0.8257	
14.0606	0.1114	25.1942	284.7826	0.8257	
15.1960	0.1412	25.2008	283.8990	0.8257	
16.1617	0.1709	25.1615	283.3234	0.8257	
16.1401	0.1730	25.2106	283.3767	0.8257	
16.7721	0.2049	25.2106	282.9606	0.8257	
16.7289	0.2070	25.2106	283.1314	0.8257	
17.1462	0.2389	25.2106	282.4589	0.8257	
17.3770	0.2707	25.1615	281.6573	0.8257	
17.3811	0.2729	25.1861	281.9139	0.8257	
17.4904	0.3026	25.1861	281.3524	0.8257	
17.4742	0.3047	25.2106	281.3524	0.8257	
17.5553	0.3345	25.2106	280.9510	0.8257	
17.5877	0.3791	25.2106	280.6618	0.8257	
17.5823	0.3812	25.1942	280.7047	0.8257	
17.5877	0.4237	25.1615	280.2760	0.8257	
17.5931	0.4258	25.1779	280.4690	0.8257	
17.5877	0.4662	25.1615	279.9865	0.8257	
17.5796	0.4683	25.2106	280.0991	0.8257	
17.5877	0.4704	25.1861	280.0670	0.8257	
17.5796	0.5108	25.1615	279.8256	0.8257	
17.5823	0.5129	25.1615	279.8256	0.8257	
17.5715	0.5702	25.2106	279.4071	0.8257	
17.5607	0.5724	25.1615	279.4608	0.8351	
17.5432	0.6340	25.1861	279.1977	0.8257	
17.5391	0.6892	25.2106	278.5368	0.8257	
17.5472	0.6913	25.1861	278.6336	0.8186	
17.5391	0.7508	25.1615	278.6336	0.8257	
17.5391	0.7529	25.1942	278.5476	0.8257	
17.5391	0.8103	25.1615	278.5368	0.8257	
17.5445	0.8124	25.1779	278.4938	0.8257	
17.5553	0.8697	25.1861	278.3110	0.8257	
17.5472	0.8718	25.1615	278.2787	0.8257	
17.5553	0.9377	25.1861	278.0366	0.8115	
17.5553	0.9398	25.1861	277.9721	0.8257	
17.5661	0.9611	25.1615	277.6869	0.8257	
17.5553	0.9632	25.1615	277.7299	0.8257	
17.5769	1.0184	25.1942	277.4176	0.8257	
17.5715	1.0205	25.1861	277.4230	0.8257	
17.5715	1.0758	25.1615	277.3422	0.8257	



TABLE 3 - TOTAL PRESSURE WINDWARD (continued, X58.9100)

TEST 47	RUN 100	POINTS 73	PoNOM 25.0000	X(cm) 58.9100	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
17.5715	1.0779	25.1615	277.2937	0.8257	
17.5661	1.1416	25.1779	277.1267	0.8257	
17.5715	1.1437	25.1615	277.1159	0.8257	
17.5553	1.2032	25.1861	276.9300	0.8257	
17.5391	1.2605	25.1615	276.8087	0.8257	
17.5391	1.2627	25.1615	276.7924	0.8257	
17.5148	1.3221	25.1861	276.5498	0.8257	
17.5148	1.3243	25.1861	276.4365	0.8257	
17.4905	1.3816	25.2106	276.3394	0.8257	
17.4796	1.3837	25.1779	276.3178	0.8257	
17.4377	1.4517	25.1615	276.3556	0.8257	
17.0367	1.5133	25.1615	275.7564	0.8257	
17.0421	1.5154	25.1615	275.9184	0.8257	
14.5737	1.5770	25.1615	275.7564	0.8257	
14.7196	1.5791	25.1615	275.7564	0.8257	
14.6224	1.6344	25.1615	275.9832	0.8257	
14.6386	1.6365	25.1861	275.9832	0.8257	
14.6386	1.6386	25.1615	276.0156	0.8540	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 99	POINTS 75	PoNOM 25.0000	X(cm) 60.1800	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
10.3082	0.0286	25.2208	292.3911	0.7894	
10.2865	0.0329	25.2535	292.0553	0.7703	
11.1589	0.0371	25.2044	290.7302	0.7703	
11.0668	0.0392	25.2044	291.2985	0.7989	
11.9121	0.0477	25.2044	289.6078	0.7774	
12.5461	0.0541	25.2044	288.9112	0.7703	
12.5786	0.0562	25.2044	288.6577	0.7846	
13.0825	0.0626	25.2044	287.9440	0.7703	
13.0338	0.0647	25.2044	288.1027	0.7703	
13.4483	0.0690	25.2044	287.1499	0.7846	
13.4727	0.0711	25.2044	287.1182	0.7989	
13.7815	0.0753	25.2044	286.4503	0.7989	
13.7571	0.0775	25.2044	286.3229	0.7703	
14.1066	0.0838	25.2044	285.7180	0.7703	
14.0253	0.0860	25.2044	285.8613	0.7703	
14.2855	0.0902	25.2044	285.4949	0.7703	
14.3559	0.0923	25.1880	285.3992	0.7703	
14.8544	0.1051	25.2535	284.6656	0.7703	
14.8056	0.1072	25.2044	284.6974	0.7703	
15.1145	0.1136	25.2044	284.3143	0.7703	
15.1145	0.1157	25.2044	284.3462	0.7703	
15.3705	0.1221	25.1921	283.7392	0.7918	
15.6387	0.1284	25.2167	283.3793	0.7774	
16.1115	0.1476	25.1880	282.8112	0.7798	
16.1224	0.1497	25.2044	282.8753	0.7989	
16.5368	0.1645	25.2044	282.4909	0.7846	
16.5368	0.1667	25.2044	282.4428	0.7846	
16.9758	0.1985	25.2044	281.9300	0.7846	
16.9514	0.2007	25.2044	282.0743	0.7703	
17.2521	0.2283	25.2044	281.8337	0.7846	
17.2440	0.2304	25.1552	281.6894	0.7703	
17.4391	0.2601	25.2044	281.4006	0.7703	
17.4228	0.2623	25.2044	281.3846	0.7846	
17.5366	0.2920	25.1798	280.9832	0.7703	
17.5366	0.2941	25.2044	280.9189	0.7989	
17.5962	0.3238	25.2044	280.8118	0.7798	
17.6504	0.3663	25.2044	280.6297	0.7703	
17.6423	0.3685	25.1798	280.4369	0.7846	
17.6747	0.4109	25.2044	280.3082	0.7703	
17.6666	0.4131	25.2044	280.3404	0.7989	
17.6829	0.4534	25.2044	279.9543	0.7989	
17.6747	0.4555	25.2044	280.0992	0.7703	
17.6829	0.5001	25.2044	280.0830	0.7703	
17.6829	0.5256	25.2044	279.8900	0.7703	
17.6666	0.6106	25.2044	279.7934	0.7703	
17.6666	0.6127	25.2044	279.8417	0.7703	
17.6341	0.6701	25.1798	279.6969	0.7703	
17.6341	0.6722	25.2044	279.6968	0.7703	
17.6287	0.7274	25.2044	279.4178	0.7798	
17.6260	0.7848	25.1798	279.0849	0.7703	
17.6341	0.7869	25.2044	278.8915	0.7989	
17.6450	0.8421	25.2044	278.6765	0.7703	
17.6504	0.9143	25.1716	278.5690	0.7894	
17.6341	0.9780	25.2044	278.5583	0.7798	
17.6179	0.9802	25.2044	278.5045	0.7703	

**TABLE 3 - TOTAL PRESSURE WINDWARD** (continued, X60.1800)

TEST 47	RUN 99	POINTS 75	PoNOM 25.0000	X(cm) 60.1800	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
17.6179	0.9972	25.2044	278.4078	0.7703	
17.6179	0.9993	25.2044	278.4077	0.7703	
17.5529	1.0588	25.2044	278.2465	0.7703	
17.5448	1.0609	25.1798	278.2626	0.7703	
17.4499	1.1267	25.2044	278.0420	0.7798	
17.3253	1.1883	25.2044	277.7945	0.7703	
17.3334	1.1905	25.1798	277.8752	0.7703	
17.2115	1.2520	25.2044	277.7622	0.7703	
17.2115	1.2542	25.2044	277.6653	0.7989	
17.0896	1.3179	25.2044	277.5199	0.7846	
17.0814	1.3200	25.2044	277.5038	0.7989	
16.9514	1.3795	25.1798	277.2129	0.7989	
16.9677	1.3816	25.1552	277.2129	0.7703	
16.7888	1.4517	25.1552	277.3422	0.7703	
16.8051	1.4538	25.2290	277.2614	0.7703	
16.6669	1.5176	25.2044	276.9057	0.7846	
16.6588	1.5197	25.2044	276.9219	0.7989	
16.4962	1.5813	25.1552	276.6954	0.7703	
16.5125	1.5834	25.2044	276.7440	0.7703	
16.3770	1.6450	25.1716	276.8033	0.7798	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 98	POINTS 61	PoNOM 25.0000	X(cm) 61.4500	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
11.1505	0.0350	25.1778	295.2390	0.7417	
11.2271	0.0371	25.4319	295.5891	0.7369	
12.1469	0.0435	25.2598	293.5029	0.7513	
12.0702	0.0456	25.2925	293.7124	0.7417	
12.7874	0.0520	25.2598	292.6851	0.7417	
12.8695	0.0541	25.2598	292.3703	0.7513	
13.3786	0.0605	25.2598	291.3616	0.7369	
13.3048	0.0626	25.2598	291.9607	0.7513	
13.8097	0.0690	25.2598	290.0666	0.7441	
14.1177	0.0732	25.2762	289.2754	0.7417	
14.1341	0.0753	25.2598	288.9587	0.7226	
14.7254	0.0966	25.2352	288.6339	0.7441	
15.2961	0.1114	25.2229	288.1661	0.7441	
15.8531	0.1306	25.2598	287.4783	0.7417	
15.8257	0.1327	25.2598	287.6583	0.7226	
16.4663	0.1603	25.2598	286.5776	0.7513	
16.4663	0.1624	25.2598	286.7154	0.7417	
16.8440	0.1922	25.2106	286.2593	0.7513	
16.8522	0.1943	25.2598	286.3390	0.7369	
16.8604	0.1964	25.2106	286.3867	0.7513	
17.0821	0.2283	25.2352	285.8135	0.7513	
17.2217	0.2750	25.2270	285.2611	0.7322	
17.2053	0.2771	25.2106	285.3354	0.7513	
17.2628	0.3196	25.2352	284.7055	0.7513	
17.2546	0.3642	25.2106	284.4580	0.7441	
17.2108	0.4109	25.2270	284.1653	0.7417	
17.2053	0.4131	25.2106	284.2824	0.7513	
17.1396	0.4662	25.2598	283.5792	0.7513	
17.1451	0.4683	25.1942	283.5153	0.7226	
17.0684	0.5235	25.1942	283.2701	0.7417	
17.0739	0.5256	25.2106	283.1314	0.7226	
16.9877	0.5851	25.2352	282.7472	0.7298	
16.9138	0.6467	25.2106	282.4028	0.7369	
16.8111	0.7189	25.2106	282.1704	0.7226	
16.8276	0.7210	25.2106	282.2452	0.7417	
16.7455	0.7933	25.2106	281.8177	0.7226	
16.7455	0.7954	25.1942	281.7856	0.7322	
16.6633	0.8676	25.2106	281.5290	0.7226	
16.6551	0.8697	25.2106	281.5129	0.7513	
16.5319	0.9398	25.2106	281.3525	0.7513	
16.5319	0.9419	25.2106	281.2401	0.7226	
16.3924	1.0099	25.1983	281.0393	0.7226	
16.3841	1.0184	25.2106	280.7582	0.7226	
16.3842	1.0205	25.2106	280.9028	0.7369	
16.2856	1.0609	25.1861	280.3966	0.7441	
16.1049	1.1395	25.1615	280.0509	0.7513	
16.1049	1.1416	25.2106	280.0830	0.7226	
15.9352	1.2181	25.1942	279.9436	0.7322	
15.9243	1.2202	25.1615	279.9221	0.7226	
15.7600	1.2924	25.2106	279.6968	0.7513	
15.7600	1.2945	25.2106	279.7130	0.7226	
15.5794	1.3667	25.1942	279.6111	0.7322	
15.3905	1.4390	25.1861	279.6003	0.7513	
15.3987	1.4411	25.2106	279.4393	0.7226	
15.2099	1.5069	25.1861	279.4232	0.7369	
15.2181	1.5091	25.2106	279.3104	0.7369	
15.0292	1.5749	25.1861	279.1816	0.7226	
15.0210	1.5770	25.1615	279.2943	0.7369	
14.8485	1.6429	25.1861	278.9882	0.7513	
14.8567	1.6450	25.2106	278.9882	0.7226	
14.6925	1.7087	25.2106	278.9882	0.7226	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 97	POINTS 59	PoNOM 25.0000	X(cm) 62.7200	Pref 14.6839
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
7.1105	0.0137	25.2044	296.8559	0.7217	
7.1023	0.0159	25.1675	296.2541	0.7145	
8.6690	0.0265	25.1306	295.2367	0.6927	
8.7674	0.0286	25.1061	295.1662	0.6927	
10.4490	0.0371	25.1061	294.0055	0.6927	
10.2358	0.0392	25.1306	294.4136	0.7217	
11.3760	0.0456	25.1061	293.3143	0.7217	
11.2940	0.0477	25.0816	293.6757	0.6927	
11.3596	0.0499	25.1061	293.5657	0.6927	
11.8681	0.0541	25.1184	292.5828	0.6927	
11.8845	0.0562	25.1061	292.3073	0.7217	
12.2086	0.0647	25.1184	291.6375	0.7072	
12.2127	0.0668	25.1061	291.8031	0.7217	
12.4587	0.0711	25.1061	290.7303	0.7024	
12.4505	0.0732	25.1061	290.7934	0.7072	
12.9017	0.0923	25.1061	290.2246	0.7217	
13.0001	0.0945	25.1225	290.0350	0.7024	
13.4964	0.1136	25.1184	289.5683	0.7072	
13.9517	0.1327	25.1552	289.0854	0.7217	
13.9558	0.1348	25.1184	288.9191	0.7000	
14.4383	0.1645	25.1225	288.3459	0.6927	
14.4110	0.1667	25.1061	288.3565	0.7217	
14.7611	0.2007	25.1061	287.9969	0.6927	
14.7556	0.2028	25.1061	288.1027	0.6927	
14.9770	0.2368	25.1184	287.6424	0.7072	
15.1575	0.2856	25.1061	287.1182	0.7145	
15.2600	0.3302	25.1184	286.7525	0.6927	
15.3134	0.3791	25.1061	286.0365	0.6927	
15.3024	0.3812	25.1061	286.0789	0.7024	
15.3134	0.4301	25.1225	285.6542	0.7120	
15.2969	0.4322	25.1552	285.5905	0.6927	
15.3298	0.4768	25.1552	285.3036	0.7217	
15.3134	0.4789	25.1225	285.2504	0.7120	
15.3134	0.5256	25.1306	285.0485	0.6927	
15.3052	0.5278	25.1061	285.0804	0.7072	
15.2969	0.5872	25.1061	284.9208	0.6927	
15.3024	0.5894	25.1225	284.8889	0.7024	
15.2887	0.6531	25.1061	284.3782	0.7145	
15.2805	0.7317	25.1388	284.0055	0.7120	
15.2805	0.7338	25.1552	283.9948	0.7217	
15.2368	0.8081	25.1552	283.6859	0.7024	
15.2313	0.8103	25.1061	283.7871	0.6927	
15.1821	0.8846	25.1061	283.4193	0.7024	
15.1821	0.8867	25.1552	283.4513	0.6927	
15.1329	0.9143	25.1061	283.0353	0.6927	
15.1411	0.9165	25.1429	283.0594	0.7000	
15.1001	0.9356	25.1552	282.7151	0.7217	
15.1001	0.9377	25.1388	282.6083	0.7024	
14.9688	1.0227	25.1061	282.3227	0.7072	
14.8212	1.1012	25.1552	282.3948	0.6927	
14.8157	1.1034	25.1388	282.3307	0.7024	
14.6571	1.1841	25.1061	282.0182	0.6927	
14.2634	1.3540	25.1061	281.7856	0.6927	
14.2798	1.3561	25.1552	281.6252	0.7120	
14.0747	1.4475	25.1429	281.2159	0.6927	
13.8943	1.5324	25.1552	281.0795	0.7072	
13.8861	1.5345	25.1306	281.0956	0.7072	
13.7261	1.6110	25.1429	280.8145	0.7000	
13.5579	1.6875	25.1552	280.6779	0.6927	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 96	POINTS 66	PoNOM 25.0000	X(cm) 63.9900	Pref 14.6397
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
6.2461	0.0072	24.9944	300.1577	0.7778	
6.2380	0.0093	25.0436	300.7784	0.7778	
8.0044	0.0199	24.9698	298.6338	0.7778	
8.0044	0.0220	24.9698	298.4677	0.7778	
9.3090	0.0305	24.9698	297.2775	0.7778	
9.3009	0.0326	24.9862	297.2514	0.7778	
9.9329	0.0411	24.9698	296.5903	0.7778	
9.9491	0.0433	24.9698	295.9699	0.7778	
10.2732	0.0518	24.9698	295.0096	0.7778	
10.2732	0.0539	24.9698	294.6646	0.7492	
10.7473	0.0751	24.9575	294.2253	0.7707	
10.7594	0.0773	24.9698	294.0997	0.7778	
11.2672	0.0964	24.9698	293.4924	0.7683	
11.2699	0.0985	24.9698	293.4714	0.7778	
11.6832	0.1197	24.9698	292.7716	0.7707	
11.6832	0.1219	24.9698	292.6221	0.7778	
11.9965	0.1410	24.9698	292.0867	0.7587	
12.0073	0.1431	24.9207	292.3073	0.7778	
12.0073	0.1452	24.9698	292.3073	0.7492	
12.2383	0.1643	24.9698	291.5981	0.7778	
12.2342	0.1665	24.9698	291.6139	0.7778	
12.4854	0.2004	24.9698	290.8723	0.7778	
12.4935	0.2026	24.9534	290.9302	0.7587	
12.7009	0.2514	24.9502	290.2689	0.7721	
12.8338	0.2982	24.9698	289.7029	0.7778	
12.8338	0.3003	24.9534	289.6026	0.7683	
12.9180	0.3491	24.9600	289.0918	0.7778	
12.9796	0.3980	24.9698	288.3881	0.7778	
12.9594	0.4001	24.9698	288.4991	0.7778	
12.9796	0.4490	24.9535	288.1873	0.7778	
12.9877	0.4511	24.9698	288.1344	0.7635	
12.9861	0.5106	24.9502	287.5884	0.7778	
12.9958	0.5743	24.9698	287.3327	0.7778	
12.9796	0.5764	24.9698	287.3088	0.7778	
12.9796	0.6380	24.9698	286.9274	0.7778	
12.9742	0.6401	24.9698	286.7578	0.7587	
12.9675	0.7017	24.9698	286.3309	0.7707	
12.9634	0.7081	24.9698	286.5139	0.7778	
12.9634	0.7654	24.9534	285.9728	0.7683	
12.9634	0.7676	24.9453	285.9091	0.7635	
12.9634	0.8461	24.9698	285.6462	0.7707	
12.9634	0.8483	24.9698	285.6861	0.7778	
12.9553	0.9205	24.9698	285.2876	0.7707	
12.9634	0.9226	24.9207	285.3036	0.7492	
12.9310	1.0118	24.9534	284.9846	0.7683	
12.9310	1.0139	24.9698	284.9208	0.7635	
12.8824	1.0925	24.9698	284.9049	0.7635	
12.8932	1.0947	24.9698	284.9315	0.7778	
12.8824	1.1010	24.9207	284.3782	0.7778	
12.8784	1.1032	24.9698	284.4261	0.7778	
12.7933	1.2348	24.9698	284.1386	0.7778	
12.8014	1.2370	24.9698	284.0907	0.7778	
12.7203	1.3156	24.9698	283.8031	0.7778	
12.7244	1.3177	24.9575	283.8031	0.7635	
12.6609	1.4005	24.9534	283.5153	0.7683	

**TABLE 3 - TOTAL PRESSURE WINDWARD** | (continued, X63.9900)

TEST 47	RUN 96	POINTS 66	PoNOM 25.0000	X(cm) 63.9900	Pref 14.6397
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
12.6555	1.4026	24.9207	283.5792	0.7778	
12.5907	1.4791	24.9698	283.3953	0.7707	
12.5259	1.5534	24.9698	283.3234	0.7778	
12.5151	1.5556	24.9698	283.2807	0.7683	
12.4205	1.6299	24.9698	282.8433	0.7778	
12.4205	1.6320	24.9698	282.9073	0.7635	
12.3152	1.7000	24.9698	282.8112	0.7778	
12.3087	1.7021	24.9600	282.6255	0.7664	
12.3098	1.7043	24.9698	282.6190	0.7778	
12.2666	1.7404	24.9698	282.5229	0.7778	
12.2072	1.7701	24.9698	282.4802	0.7683	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 143	POINTS 87	PoNOM 25.0000	X(cm) 65.1800	Pref 14.7674
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.4004	0.0635	25.5509	284.9527	0.8511	
3.4058	0.0656	25.5673	284.8889	0.8606	
3.3491	0.0720	25.4201	284.3143	0.8464	
3.3410	0.0741	25.4201	284.1546	0.8321	
3.2328	0.0868	25.3874	284.0800	0.8511	
4.7357	0.1017	25.3220	283.8670	0.8606	
5.4736	0.1038	25.3465	283.9309	0.8321	
7.6223	0.1251	25.3220	283.8031	0.8321	
8.3197	0.1272	25.2975	283.7232	0.8464	
9.0225	0.1527	25.2893	283.3660	0.8511	
9.7468	0.1824	25.2730	283.0353	0.8606	
9.8279	0.1845	25.2730	283.0674	0.8606	
9.8441	0.1866	25.2730	283.0034	0.8321	
10.2982	0.2228	25.2975	282.7791	0.8464	
10.3306	0.2249	25.2730	282.7151	0.8606	
10.5252	0.2589	25.2730	282.6511	0.8321	
10.5577	0.2610	25.2730	282.5229	0.8606	
10.7361	0.2971	25.2730	282.1064	0.8464	
10.7361	0.2992	25.2730	282.2025	0.8606	
10.8442	0.3396	25.2730	281.9353	0.8416	
10.9469	0.3757	25.2730	281.7215	0.8606	
10.9388	0.3778	25.2730	281.5771	0.8464	
10.9793	0.4139	25.2730	281.5610	0.8321	
11.0037	0.4160	25.2485	281.4327	0.8464	
11.0523	0.4543	25.2730	281.2722	0.8464	
11.0604	0.4564	25.2730	281.3685	0.8606	
11.0848	0.4946	25.2485	280.9350	0.8321	
11.0766	0.4989	25.2730	280.9832	0.8321	
11.1091	0.5371	25.2566	280.7261	0.8321	
11.1415	0.5732	25.2730	280.6940	0.8321	
11.1253	0.5753	25.3220	280.6297	0.8321	
11.1577	0.6115	25.2730	280.4368	0.8321	
11.1577	0.6136	25.2730	280.4047	0.8321	
11.1577	0.6518	25.2730	280.3725	0.8321	
11.1577	0.6561	25.2730	280.4047	0.8321	
11.2064	0.6964	25.2730	280.5493	0.8464	
11.2226	0.7325	25.3220	280.4047	0.8321	
11.2226	0.7346	25.2730	280.4047	0.8321	
11.1902	0.7750	25.2730	280.0830	0.8321	
11.1983	0.7793	25.2975	280.1635	0.8464	
11.1902	0.8196	25.2730	280.0509	0.8606	
11.1739	0.8217	25.2730	280.0830	0.8606	
11.1902	0.8600	25.3220	280.0187	0.8321	
11.1902	0.8642	25.3220	279.9543	0.8606	
11.1902	0.9109	25.2730	279.7291	0.8321	
11.1739	0.9152	25.2730	279.8256	0.8321	
11.1902	0.9640	25.2730	279.7612	0.8606	
11.1902	0.9683	25.3220	279.6968	0.8321	
11.1658	1.0108	25.2730	279.4393	0.8321	
11.1415	1.0129	25.2730	279.5037	0.8321	
11.1685	1.0617	25.2730	279.2568	0.8416	
11.1415	1.1042	25.3220	279.1171	0.8321	
11.1415	1.1085	25.2975	279.0204	0.8321	
11.1415	1.1467	25.3220	279.0204	0.8321	
11.1415	1.1531	25.3220	279.1816	0.8321	



TABLE 3 - TOTAL PRESSURE WINDWARD (continued, X65.1800)

TEST 47	RUN 143	POINTS 87	PoNOM 25.0000	X(cm) 65.1800	Pref 14.7674
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
11.1415	1.1552	25.3220	279.0527	0.8606	
11.0929	1.1998	25.3220	279.1171	0.8606	
11.1091	1.2019	25.3220	279.0849	0.8606	
11.1091	1.2041	25.3220	279.0527	0.8606	
11.1091	1.2465	25.3220	278.9237	0.8321	
11.0929	1.2508	25.2730	278.8593	0.8606	
11.0604	1.2933	25.2730	278.9882	0.8321	
11.0685	1.2954	25.2730	278.9721	0.8321	
11.0604	1.3506	25.3220	278.7625	0.8321	
11.0280	1.3549	25.3220	278.7625	0.8321	
11.0442	1.3570	25.2730	278.7303	0.8606	
11.0118	1.4037	25.2730	278.6658	0.8321	
11.0280	1.4080	25.2730	278.6658	0.8321	
10.9712	1.4611	25.2975	278.6497	0.8321	
10.9631	1.5227	25.2730	278.6336	0.8606	
10.9307	1.5248	25.2730	278.5368	0.8606	
10.9145	1.5821	25.2730	278.3755	0.8321	
10.9145	1.5864	25.3220	278.2465	0.8321	
10.8820	1.6437	25.2730	278.2787	0.8321	
10.8820	1.6459	25.2730	278.2787	0.8321	
10.8820	1.7011	25.3220	278.2465	0.8321	
10.8820	1.7032	25.2730	278.2787	0.8321	
10.8658	1.7075	25.2730	278.1496	0.8321	
10.8658	1.7669	25.2730	278.0851	0.8321	
10.8658	1.7690	25.3220	278.1496	0.8321	
10.8658	1.7712	25.3220	278.0528	0.8321	
10.8496	1.8243	25.2730	277.8914	0.8321	
10.8496	1.8264	25.2730	277.9236	0.8606	
10.8334	1.8285	25.2730	277.8914	0.8321	
10.8253	1.8816	25.2485	277.8107	0.8464	
10.8009	1.9199	25.2730	277.7622	0.8321	
10.8009	1.9220	25.2730	277.6007	0.8321	

TABLE 3 - TOTAL PRESSURE WINDWARD

TEST 47	RUN 144	POINTS 108	PoNOM 25.0000	X(cm) 66.4600	Pref 14.7753
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.8014	0.0550	25.0505	293.2197	0.7610	
2.8092	0.0571	25.0505	293.1570	0.7610	
2.7256	0.0656	24.8695	291.3720	0.7515	
2.6367	0.0741	24.8037	290.3195	0.7467	
2.6367	0.0762	24.8284	290.2247	0.7467	
2.5896	0.0826	24.8530	289.5287	0.7324	
2.5896	0.0847	24.9024	289.3388	0.7610	
2.8877	0.0889	25.0505	289.0221	0.7610	
3.1230	0.0932	25.0011	288.6101	0.7610	
4.2054	0.0996	25.0505	288.0709	0.7610	
4.4408	0.1038	25.1739	287.8488	0.7610	
5.3663	0.1059	25.1985	287.5948	0.7324	
5.5389	0.1102	25.1492	287.6583	0.7896	
5.4918	0.1123	25.1492	287.6900	0.7610	
6.2814	0.1187	25.2479	286.7472	0.7705	
6.3546	0.1208	25.1985	286.4503	0.7610	
6.7468	0.1229	25.1492	285.8135	0.7610	
6.8410	0.1272	25.2232	285.7976	0.7753	
7.1782	0.1357	25.2972	285.3674	0.7753	
7.1861	0.1378	25.2972	285.3992	0.7610	
7.6175	0.1548	25.1985	284.6337	0.7610	
7.6253	0.1569	25.2479	284.6656	0.7610	
8.1587	0.1739	25.1985	284.3462	0.7610	
8.1980	0.1782	25.1739	284.1227	0.7610	
8.6136	0.1951	25.1245	283.7072	0.7753	
8.6136	0.1994	25.1492	283.6432	0.7610	
8.9195	0.2164	25.1492	283.3714	0.7610	
8.9117	0.2185	25.1492	283.3873	0.7610	
9.0999	0.2376	25.1739	282.7632	0.7753	
9.1313	0.2397	25.1985	282.7472	0.7610	
9.2411	0.2589	25.1492	282.4268	0.7610	
9.2568	0.2610	25.1492	282.4589	0.7610	
9.3509	0.2780	25.1492	282.3307	0.7324	
9.3509	0.2822	25.1492	282.2666	0.7610	
9.4843	0.3141	25.1492	281.9941	0.7753	
9.4764	0.3183	25.1492	282.0743	0.7610	
9.5706	0.3502	25.1492	281.7215	0.7610	
9.5627	0.3544	25.1492	281.8017	0.7753	
9.6333	0.3842	25.1985	281.1758	0.7610	
9.6333	0.3863	25.1985	281.1919	0.7610	
9.6490	0.3884	25.1985	281.0474	0.7610	
9.6804	0.4160	25.1492	280.8225	0.7610	
9.6804	0.4203	25.1985	280.8707	0.7610	
9.6804	0.4224	25.1985	280.9189	0.7896	
9.7274	0.4522	25.1492	280.6940	0.7610	
9.7274	0.4543	25.1492	280.5493	0.7610	
9.7431	0.4883	25.1985	280.4690	0.7610	
9.7588	0.4925	25.1739	280.1956	0.7610	
9.7745	0.5371	25.1985	279.9865	0.7610	
9.7667	0.5414	25.1739	279.9543	0.7610	
9.7902	0.5838	25.1492	280.0187	0.7610	
9.7902	0.5860	25.1492	279.8578	0.7610	
9.8059	0.5881	25.1985	279.8578	0.7610	
9.7902	0.6306	25.1492	279.6325	0.7610	
9.7745	0.6348	25.1985	279.6003	0.7610	

TABLE 3 - TOTAL PRESSURE WINDWARD (continued, X66.4600)

TEST 47	RUN 144	POINTS 108	PoNOM 25.0000	X(cm) 66.4600	Pref 14.7753
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
9.8373	0.6794	25.1492	279.3104	0.7610	
9.8268	0.6815	25.1656	279.4608	0.7705	
9.8843	0.7283	25.1492	279.2460	0.7610	
9.8843	0.7304	25.1985	279.1171	0.7610	
9.8843	0.7750	25.1985	279.0527	0.7610	
9.8608	0.7793	25.1985	279.1494	0.7610	
9.8608	0.7814	25.1985	279.1010	0.7610	
9.8373	0.8281	25.1985	278.7625	0.7896	
9.8529	0.8302	25.1985	278.7948	0.7610	
9.8295	0.8770	25.1492	278.6013	0.7610	
9.8373	0.9237	25.1985	278.6013	0.7610	
9.8373	0.9258	25.1739	278.4884	0.7610	
9.8295	0.9725	25.1739	278.3110	0.7610	
9.8216	0.9747	25.1985	278.2787	0.7610	
9.8059	0.9917	25.1492	278.0205	0.7610	
9.8059	0.9938	25.1492	278.2787	0.7324	
9.8216	0.9959	25.1574	278.0635	0.7610	
9.8138	1.0214	25.1492	277.5684	0.7467	
9.8216	1.0235	25.1492	277.3098	0.7610	
9.8059	1.0256	25.1492	277.5361	0.7610	
9.8216	1.0851	25.1985	277.4068	0.7610	
9.8138	1.0894	25.1492	277.2775	0.7610	
9.7902	1.1488	25.1492	277.2452	0.7610	
9.8059	1.1531	25.1492	277.2129	0.7610	
9.8059	1.1552	25.1492	277.3098	0.7896	
9.7902	1.2210	25.1492	277.3098	0.7610	
9.7902	1.2253	25.1739	277.3098	0.7610	
9.8059	1.2933	25.1985	277.3422	0.7610	
9.7980	1.2954	25.1985	277.1805	0.7610	
9.7902	1.3740	25.2479	277.0512	0.7610	
9.8059	1.3782	25.1985	276.7601	0.7610	
9.8059	1.3804	25.2479	276.8248	0.7610	
9.7902	1.4568	25.1492	276.6954	0.7610	
9.7824	1.4589	25.1985	276.6631	0.7753	
9.7745	1.5312	25.1492	276.6307	0.7610	
9.7745	1.5333	25.1985	276.6631	0.7610	
9.7745	1.5354	25.1492	276.6631	0.7610	
9.7745	1.6055	25.1492	276.5660	0.7610	
9.7745	1.6076	25.1492	276.5013	0.7610	
9.7745	1.6097	25.1492	276.5337	0.7753	
9.7745	1.6756	25.1492	276.4203	0.7610	
9.7745	1.6820	25.1492	276.3718	0.7610	
9.7745	1.7478	25.1492	276.2423	0.7610	
9.7745	1.7499	25.0998	276.3070	0.7610	
9.7745	1.7521	25.1492	276.2746	0.7610	
9.7745	1.7542	25.1492	276.1451	0.7610	
9.7745	1.8115	25.1492	276.0804	0.7610	
9.7745	1.8158	25.1492	276.0804	0.7610	
9.7745	1.8179	25.1492	276.1127	0.7610	
9.7745	1.8774	25.0998	275.9832	0.7610	
9.7667	1.8795	25.1492	275.9184	0.7753	
9.7745	1.9241	25.1492	276.0156	0.7610	
9.7745	1.9283	25.1492	275.9184	0.7705	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 133	POINTS 75	PoNOM 25.0000	X(cm) 51.2900	Prof 14.7704
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.7859	0.1524	25.0428	299.8159	0.7588	
0.7900	0.1545	25.0920	298.8829	0.7588	
0.7941	0.1566	25.0920	299.6917	0.7872	
0.7839	0.1630	25.0920	298.4937	0.7730	
0.7736	0.1758	25.0920	298.1977	0.7588	
0.7777	0.1779	25.0920	297.6988	0.7588	
0.7736	0.1864	25.0428	297.6675	0.7872	
0.7777	0.1885	25.0920	297.0121	0.7588	
0.7695	0.2097	25.0428	296.4183	0.7872	
0.7654	0.2119	25.0428	296.3870	0.7303	
0.7532	0.2289	25.0428	296.1994	0.7303	
0.7572	0.2310	25.0428	296.1056	0.7588	
0.7545	0.2544	25.0592	295.5525	0.7588	
0.7409	0.2735	25.0428	295.2289	0.7588	
0.7409	0.2756	25.0428	295.1035	0.7588	
0.7327	0.2947	25.0428	294.7900	0.7588	
0.7368	0.2968	25.0920	294.7274	0.7872	
0.7245	0.3159	24.9937	294.6019	0.7588	
0.7245	0.3181	24.9937	294.3509	0.7588	
0.7177	0.3457	25.0428	294.2672	0.7588	
0.7149	0.3818	25.0592	293.8380	0.7683	
0.7041	0.4179	25.0428	293.5029	0.7588	
0.7081	0.4200	25.0428	293.2986	0.7588	
0.7041	0.4540	25.0428	293.0627	0.7588	
0.7041	0.4561	24.9937	292.9998	0.7588	
0.7000	0.4583	25.0428	292.9683	0.7588	
0.7021	0.5071	25.0428	292.8109	0.7588	
0.7000	0.5092	24.9937	292.6221	0.7588	
0.7027	0.5581	25.0428	292.4017	0.7588	
0.7000	0.6069	24.9937	291.8346	0.7588	
0.7041	0.6112	24.9937	291.7085	0.7588	
0.6959	0.6579	25.0428	291.3616	0.7872	
0.7000	0.6622	25.0428	291.3616	0.7588	
0.7000	0.7110	25.0428	290.9513	0.7872	
0.7000	0.7131	25.0428	291.0460	0.7588	
0.6980	0.7641	25.0183	290.6039	0.7588	
0.6980	0.7662	25.0183	290.5407	0.7588	
0.6980	0.8151	25.0183	290.3827	0.7588	
0.6959	0.8703	25.0428	290.2246	0.7588	
0.6973	0.8724	25.0101	290.0560	0.7588	
0.6918	0.9213	25.0428	289.7503	0.7588	
0.6959	0.9234	24.9937	289.8452	0.7588	
0.6959	0.9744	24.9937	289.6237	0.7588	
0.6959	0.9786	24.9937	289.5287	0.7588	
0.6959	1.0275	24.9937	289.2122	0.7588	
0.6959	1.0317	24.9937	289.1488	0.7588	
0.7000	1.0742	25.0428	288.5150	0.7588	
0.7000	1.0764	24.9937	288.4516	0.7588	
0.6918	1.1273	24.9937	288.5150	0.7588	
0.6959	1.1295	24.9937	288.5467	0.7588	
0.6959	1.1443	25.0428	288.0234	0.7730	
0.6918	1.1783	25.0428	287.5312	0.7588	
0.7000	1.1826	24.9937	287.4041	0.7588	
0.7000	1.2314	25.0428	286.6730	0.7588	
0.7000	1.2335	24.9937	286.8002	0.7588	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X51.2900)

TEST 47	RUN 133	POINTS 75	PoNOM 25.0000	X(cm) 51.2900	Prof 14.7704
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.6959	1.2760	25.0428	286.5776	0.7588	
0.7000	1.2824	24.9937	286.3867	0.7872	
0.6918	1.3185	25.0428	285.9728	0.7588	
0.6959	1.3249	25.0428	286.0046	0.7588	
0.7021	1.3673	24.9937	285.9091	0.7588	
0.6959	1.4204	24.9937	285.6861	0.7588	
0.7041	1.4247	24.9937	285.6224	0.7588	
0.7061	1.4778	25.0183	285.6383	0.7872	
0.7122	1.5458	24.9937	285.4949	0.7588	
0.7163	1.5479	24.9937	285.4630	0.7872	
0.7388	1.6137	24.9937	285.3673	0.7588	
0.7736	1.6774	24.9937	285.3354	0.7588	
0.8677	1.7497	24.9937	285.0804	0.7303	
0.9046	1.7518	25.0183	285.0485	0.7730	
1.0205	1.8219	24.9937	284.9102	0.7588	
1.1869	1.8835	24.9937	284.7294	0.7872	
1.2074	1.8856	24.9937	284.7613	0.7588	
1.3751	1.9430	24.9937	284.5379	0.7303	
1.4161	1.9493	24.9937	284.5379	0.7872	
1.6084	1.9961	24.9937	284.4740	0.7588	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 132	POINTS 84	PoNOM 25.0000	X(cm) 51.9250	Pref 14.8169
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.1937	0.1503	25.2794	295.0409	0.7632	
1.1815	0.1524	25.2794	295.3542	0.7632	
1.1652	0.1545	25.2303	294.1939	0.7632	
1.1733	0.1566	25.2303	294.3195	0.7632	
1.1692	0.1630	25.2794	293.6286	0.7632	
1.1652	0.1651	25.2303	293.1884	0.7632	
1.1529	0.1715	25.2794	292.9054	0.7632	
1.1570	0.1736	25.2303	292.6537	0.7346	
1.1475	0.1843	25.2303	292.0658	0.7632	
1.1326	0.1949	25.2467	291.7610	0.7632	
1.1326	0.2013	25.2303	291.1722	0.7346	
1.1346	0.2034	25.2303	290.9986	0.7632	
1.1204	0.2097	25.2057	290.5091	0.7632	
1.1041	0.2310	25.2303	290.2563	0.7346	
1.0939	0.2331	25.2303	290.0191	0.7632	
1.0837	0.2522	25.2303	289.8135	0.7632	
1.0776	0.2544	25.2303	289.7028	0.7489	
1.0511	0.2756	25.2303	289.2755	0.7632	
1.0654	0.2777	25.2303	289.5604	0.7632	
1.0307	0.2947	25.2303	288.7686	0.7632	
1.0226	0.2968	25.2057	288.6894	0.7489	
0.9982	0.3308	25.1811	288.4199	0.7632	
0.9982	0.3329	25.1811	288.3881	0.7632	
0.9982	0.3351	25.1811	288.4833	0.7632	
0.9534	0.3669	25.2303	288.2296	0.7632	
0.9452	0.3691	25.1811	287.9757	0.7632	
0.9493	0.3712	25.2303	288.1027	0.7632	
0.9126	0.4009	25.1811	287.5948	0.7632	
0.9025	0.4052	25.1811	287.6424	0.7632	
0.8732	0.4413	25.1975	287.4042	0.7441	
0.8475	0.4880	25.2057	287.1023	0.7489	
0.8475	0.4901	25.2303	287.1500	0.7632	
0.8271	0.5368	25.1811	286.8638	0.7632	
0.8230	0.5390	25.1320	286.6730	0.7918	
0.8013	0.5899	25.1811	286.3230	0.7537	
0.7945	0.6367	25.1811	286.2593	0.7632	
0.7844	0.6388	25.1811	286.0205	0.7632	
0.7782	0.6834	25.2303	285.7498	0.7346	
0.7782	0.6855	25.2057	285.7180	0.7489	
0.7660	0.7344	25.1811	285.3992	0.7632	
0.7660	0.7386	25.1811	285.3833	0.7632	
0.7538	0.7854	25.1811	285.2717	0.7346	
0.7579	0.7896	25.1811	284.9847	0.7632	
0.7538	0.7917	25.1811	285.0804	0.7632	
0.7538	0.8363	25.1811	284.7294	0.7632	
0.7456	0.8385	25.1320	284.8251	0.7632	
0.7497	0.8406	25.1811	284.6974	0.7632	
0.7456	0.9043	25.1811	284.6974	0.7632	
0.7416	0.9086	25.1811	284.6337	0.7632	
0.7375	0.9723	25.2057	284.4420	0.7489	
0.7416	0.9765	25.1811	284.3782	0.7346	
0.7436	1.0402	25.1811	284.3781	0.7489	
0.7483	1.0827	25.1811	284.1440	0.7537	
0.7538	1.0912	25.1811	283.7392	0.7632	
0.7619	1.0933	25.1320	283.7391	0.7632	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X51.9250)

TEST 47	RUN 132	POINTS 84	PoNOM 25.0000	X(cm) 51.9250	Pref 14.8169
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.7660	1.1464	25.1811	283.5473	0.7632	
0.7660	1.1507	25.1811	283.3394	0.7632	
0.8027	1.2017	25.1811	283.1634	0.7632	
0.7904	1.2038	25.1811	283.2274	0.7632	
0.7986	1.2059	25.1811	283.1634	0.7632	
0.8434	1.2633	25.1811	283.0994	0.7632	
0.8597	1.2654	25.1811	283.0674	0.7632	
0.8597	1.2675	25.1811	283.0674	0.7632	
0.8963	1.3206	25.1811	283.0034	0.7632	
0.9167	1.3227	25.1811	282.9393	0.7632	
1.0063	1.3801	25.1811	282.7151	0.7632	
1.1081	1.4353	25.1811	282.5229	0.7346	
1.1570	1.4396	25.1811	282.4909	0.7632	
1.3362	1.4927	25.1811	282.4268	0.7632	
1.3036	1.4948	25.1811	282.5229	0.7632	
1.5765	1.5691	25.1320	282.2025	0.7632	
1.6743	1.5755	25.1811	282.1224	0.7489	
1.8087	1.6477	25.1811	281.9460	0.7632	
1.8494	1.6520	25.1811	282.0903	0.7632	
1.8576	1.7157	25.1320	282.0102	0.7346	
1.8617	1.7242	25.1811	281.8177	0.7632	
1.8617	1.7263	25.1811	281.7856	0.7632	
1.8657	1.7943	25.1647	281.5076	0.7632	
1.8657	1.8601	25.1566	281.4809	0.7632	
1.8657	1.8644	25.1811	281.3364	0.7632	
1.8698	1.9217	25.1811	281.3043	0.7346	
1.8678	1.9238	25.1566	281.2882	0.7489	
1.8698	1.9791	25.1811	281.2079	0.7632	
1.8698	1.9812	25.1320	281.1116	0.7632	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 131	POINTS 73	PoNOM 25.0000	X(cm) 52.5600	Pref 14.7754
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.4364	0.1524	25.1485	296.2828	0.7568	
1.4337	0.1545	25.1485	296.1368	0.7568	
1.4297	0.1566	25.1485	295.7613	0.7568	
1.4317	0.1588	25.0993	295.5578	0.7568	
1.4297	0.1651	25.1485	295.1349	0.7568	
1.4297	0.1673	25.1485	295.0409	0.7568	
1.4256	0.1694	25.0993	294.8841	0.7568	
1.4215	0.1779	25.1239	294.2724	0.7568	
1.4215	0.1800	25.1485	294.2253	0.7568	
1.4134	0.1906	25.1239	293.6600	0.7568	
1.4134	0.1928	25.1485	293.6286	0.7568	
1.4011	0.2119	25.0993	293.2985	0.7426	
1.4011	0.2161	25.0993	292.9683	0.7568	
1.3808	0.2395	25.0993	292.7166	0.7568	
1.3848	0.2437	25.0993	292.6222	0.7568	
1.3523	0.2671	25.0993	292.4017	0.7568	
1.3543	0.2692	25.0993	292.1971	0.7568	
1.3360	0.2926	25.0993	291.9292	0.7568	
1.3278	0.2968	25.0993	291.7085	0.7568	
1.2911	0.3499	25.0993	291.4720	0.7426	
1.2789	0.3521	25.0502	291.5193	0.7568	
1.2463	0.4052	25.0993	291.1092	0.7568	
1.2463	0.4073	25.0993	291.0776	0.7568	
1.2015	0.4583	25.0993	290.6671	0.7568	
1.1954	0.4625	25.0748	290.4775	0.7568	
1.1689	0.5135	25.0993	290.2246	0.7568	
1.1526	0.5156	25.0993	290.1509	0.7568	
1.1282	0.5687	25.0993	289.8452	0.7568	
1.1221	0.5708	25.0993	289.8294	0.7568	
1.1200	0.6239	25.0993	289.7186	0.7568	
1.1159	0.6261	25.0993	289.6237	0.7568	
1.0956	0.7068	25.0748	289.1964	0.7568	
1.0996	0.7089	25.0993	289.2438	0.7568	
1.1200	0.7896	25.0502	288.8637	0.7568	
1.1221	0.7917	25.0993	288.8003	0.7568	
1.1445	0.8661	25.0502	288.4833	0.7568	
1.1689	0.8703	25.0748	288.4516	0.7568	
1.2137	0.9192	25.0666	288.0710	0.7568	
1.2259	0.9234	25.0993	288.0075	0.7568	
1.2219	0.9277	25.0748	287.9599	0.7568	
1.2382	0.9340	25.0993	287.6265	0.7568	
1.2300	0.9362	25.0502	287.5312	0.7568	
1.2259	0.9383	25.0993	287.6583	0.7568	
1.2646	0.9978	25.0993	287.3565	0.7568	
1.2789	0.9999	25.0502	287.2453	0.7568	
1.3156	1.0764	25.0993	287.1182	0.7568	
1.3441	1.0785	25.0748	286.9274	0.7568	
1.4949	1.1592	25.0502	286.8320	0.7568	
1.5376	1.1656	25.0502	286.7366	0.7568	
1.7638	1.2441	25.0502	286.5457	0.7568	
1.8452	1.2463	25.0502	286.4185	0.7568	
1.8208	1.2484	25.0502	286.4503	0.7568	
1.8656	1.3206	25.0502	286.2275	0.7568	
1.8656	1.3227	25.0502	286.1957	0.7568	
1.8656	1.3249	25.0502	286.1320	0.7568	



**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X52.5600)

TEST 47	RUN 131	POINTS 73	PoNOM 25.0000	X(cm) 52.5600	Pref 14.7754
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.8656	1.4034	25.0502	285.9728	0.7568	
1.8636	1.4056	25.0502	285.9091	0.7568	
1.8615	1.4778	25.0502	285.7817	0.7568	
1.8636	1.4842	25.0502	285.6861	0.7568	
1.8615	1.5564	25.0502	285.6861	0.7568	
1.8656	1.5585	25.0993	285.4949	0.7568	
1.8656	1.5606	25.0502	285.5267	0.7568	
1.8656	1.6371	25.0502	285.4311	0.7568	
1.8656	1.6392	25.0502	285.4152	0.7568	
1.8595	1.7072	25.0748	285.1920	0.7568	
1.8615	1.7114	25.0993	285.0804	0.7568	
1.8615	1.7752	25.0993	284.8889	0.7568	
1.8588	1.7773	25.0666	284.6868	0.7568	
1.8615	1.8389	25.0502	284.4421	0.7568	
1.8636	1.8431	25.0748	284.4421	0.7568	
1.8615	1.8983	25.0502	284.4101	0.7568	
1.8615	1.9005	25.0502	284.2824	0.7568	
1.8575	1.9047	25.0502	284.3143	0.7568	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 130	POINTS 85	PoNOM 25.0000	X(cm) 53.1950	Pref 14.7518
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.4756	0.1503	25.3617	298.1351	0.7214	
1.4735	0.1524	25.3127	299.7538	0.7214	
1.4749	0.1588	25.3781	295.0826	0.7214	
1.4695	0.1673	25.3617	293.6286	0.7214	
1.4776	0.1694	25.3617	293.0627	0.7214	
1.4776	0.1715	25.3617	293.2199	0.7214	
1.4735	0.1758	25.3127	292.7480	0.7214	
1.4776	0.1779	25.3127	292.3703	0.7214	
1.4735	0.1800	25.3617	292.0237	0.7214	
1.4695	0.1864	25.3127	291.4878	0.7214	
1.4735	0.1885	25.3127	291.3931	0.7214	
1.4735	0.1970	25.3127	290.7461	0.7214	
1.4735	0.1991	25.3127	290.2879	0.7214	
1.4776	0.2182	25.3127	290.0982	0.7214	
1.4776	0.2204	25.2882	289.7029	0.7214	
1.4776	0.2459	25.3127	289.3388	0.7214	
1.4776	0.2480	25.2882	289.1013	0.7214	
1.4756	0.2692	25.2636	288.4673	0.7214	
1.4735	0.2713	25.2636	288.5150	0.7214	
1.4735	0.2947	25.2636	287.3247	0.7214	
1.4735	0.2968	25.2636	287.6265	0.7214	
1.4735	0.3181	25.2636	287.1182	0.7214	
1.4735	0.3202	25.2636	287.1182	0.7214	
1.4776	0.3223	25.2145	287.0546	0.7214	
1.4756	0.3457	25.2145	286.6412	0.7214	
1.4776	0.3478	25.1654	286.6412	0.7214	
1.4940	0.4030	25.1654	286.3230	0.7214	
1.5021	0.4052	25.1654	286.2912	0.7214	
1.5021	0.4073	25.1654	286.1002	0.7214	
1.5634	0.4583	25.1654	285.7020	0.7214	
1.5634	0.4625	25.1654	285.8454	0.7214	
1.6805	0.5177	25.1654	285.1761	0.7214	
1.8167	0.5730	25.1654	284.7932	0.7214	
1.8630	0.5751	25.1654	284.4208	0.7214	
2.0209	0.6303	25.1654	284.4421	0.7214	
2.0924	0.6324	25.1654	284.1227	0.7214	
2.3150	0.6834	25.1654	283.9948	0.7214	
2.4049	0.6855	25.1654	283.8191	0.7214	
2.4253	0.6877	25.1654	283.5792	0.7214	
2.7357	0.7429	25.1654	283.4193	0.7214	
2.7112	0.7450	25.1409	283.4673	0.7214	
3.0135	0.8002	25.1163	283.0034	0.7214	
3.0911	0.8066	25.1163	283.1313	0.7214	
3.1401	0.8618	25.1654	282.5870	0.7214	
3.1319	0.8639	25.1654	282.9073	0.7214	
3.1401	0.8661	25.1654	282.5550	0.7214	
2.9604	0.9192	25.1163	282.7472	0.7214	
2.9216	0.9213	25.1409	282.6350	0.7214	
2.9399	0.9234	25.1654	282.3948	0.7214	
2.6826	0.9786	25.1163	282.2666	0.7214	
2.7725	0.9808	25.1654	282.3307	0.7214	
2.6499	0.9829	25.1163	282.1384	0.7214	
2.4784	1.0360	25.1654	282.0102	0.7214	
2.3803	1.0381	25.1163	281.9460	0.7214	
2.3967	1.0402	25.1163	281.9460	0.7214	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X53.1950)

TEST 47	RUN 130	POINTS 85	PoNOM 25.0000	X(cm) 53.1950	Pref 14.7518
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.2415	1.0827	25.1163	281.8177	0.7214	
2.2020	1.0870	25.1327	281.7536	0.7214	
2.0536	1.1528	25.1163	281.4969	0.7214	
2.0222	1.1549	25.1163	281.3685	0.7214	
1.9161	1.2335	25.1163	281.2722	0.7214	
1.9433	1.2357	25.1163	281.3685	0.6928	
1.8806	1.3142	25.0999	280.9938	0.7119	
1.8779	1.3164	25.1163	281.0153	0.7214	
1.8738	1.3928	25.1163	280.9189	0.7214	
1.8698	1.3950	25.1163	280.7904	0.7214	
1.8698	1.4672	25.1163	280.7582	0.7214	
1.8738	1.4714	25.0672	280.6940	0.7214	
1.8657	1.4735	25.1163	280.7582	0.7214	
1.8657	1.5500	25.1163	280.6297	0.7214	
1.8616	1.5521	25.1163	280.4368	0.7214	
1.8616	1.6243	25.0918	280.2439	0.7214	
1.8595	1.6265	25.0918	280.1474	0.7214	
1.8534	1.6902	25.0672	279.9865	0.7214	
1.8575	1.6944	25.0918	280.0831	0.7214	
1.8575	1.6966	25.1163	279.9865	0.7214	
1.8534	1.7624	25.1163	279.8417	0.7214	
1.8534	1.7645	25.0918	279.8417	0.7214	
1.8575	1.8261	25.0672	279.7934	0.7214	
1.8555	1.8283	25.1163	279.7612	0.7214	
1.8575	1.8304	25.1163	279.6325	0.7214	
1.8534	1.8920	25.0918	279.5842	0.7214	
1.8575	1.8941	25.1163	279.6003	0.7214	
1.8534	1.9430	25.1163	279.6003	0.7214	
1.8575	1.9472	25.0672	279.2460	0.7214	
1.8616	1.9493	25.0672	279.4715	0.7214	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 129	POINTS 80	PoNOM 25.0000	X(cm) 53.8300	Pref 14.7518
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.0917	0.1524	25.3629	294.9255	0.7505	
2.0978	0.1545	25.3875	295.0095	0.7505	
2.0712	0.1588	25.0684	292.9369	0.7220	
2.0671	0.1609	25.0684	292.0553	0.7505	
2.0671	0.1630	25.0520	292.3072	0.7410	
2.0549	0.1694	25.0684	291.3931	0.7505	
2.0570	0.1715	25.1175	291.0460	0.7220	
2.0590	0.1736	25.0684	291.2669	0.7505	
2.0518	0.1821	25.0930	290.5723	0.7363	
2.0508	0.1885	25.1175	289.9084	0.7505	
2.0467	0.1906	25.1175	289.6395	0.7363	
2.0508	0.1928	25.1175	289.6237	0.7505	
2.0385	0.2097	25.1175	288.8320	0.7505	
2.0385	0.2119	25.0684	289.1013	0.7505	
2.0344	0.2140	25.0684	288.7052	0.7220	
2.0202	0.2352	25.0684	288.5150	0.7505	
2.0140	0.2374	25.0684	288.1027	0.7505	
1.9895	0.2586	25.0684	287.5630	0.7220	
1.9922	0.2607	25.0848	287.7535	0.7505	
1.9486	0.2798	25.0684	287.1500	0.7505	
1.9609	0.2820	25.0684	287.3088	0.7505	
1.9404	0.2841	25.0684	286.9592	0.7363	
1.8955	0.3032	25.0684	286.8002	0.7220	
1.8894	0.3053	25.0684	286.7207	0.7505	
1.8750	0.3075	25.0684	286.3867	0.7220	
1.8127	0.3308	25.0561	286.0285	0.7505	
1.6788	0.3839	25.0684	285.5905	0.7505	
1.6502	0.3860	25.0520	285.3460	0.7505	
1.5297	0.4413	25.0684	284.9208	0.7505	
1.5562	0.4434	25.0438	285.0165	0.7505	
1.4990	0.4965	25.0684	284.4101	0.7505	
1.4908	0.4986	25.0684	284.4101	0.7505	
1.4867	0.5007	25.0438	284.4740	0.7505	
1.5058	0.5560	25.0357	284.1866	0.7505	
1.5112	0.5581	25.0193	284.1226	0.7220	
1.5644	0.6112	25.0684	283.7711	0.7220	
1.6012	0.6133	25.0193	283.6432	0.7410	
1.7667	0.6685	25.0438	283.3394	0.7505	
1.7381	0.6707	25.0438	283.4193	0.7505	
1.9241	0.7259	25.0438	283.2114	0.7505	
1.9507	0.7280	25.0193	283.2274	0.7505	
2.1080	0.7832	25.0193	282.9393	0.7220	
2.1979	0.7854	25.0193	282.8112	0.7505	
2.1734	0.7875	25.0438	282.8752	0.7505	
2.5699	0.8746	25.1666	282.5550	0.7505	
2.5168	0.8767	25.1666	282.6617	0.7505	
2.9337	0.9659	25.1666	282.2239	0.7315	
2.9582	0.9680	25.1666	282.2986	0.7505	
3.0114	1.0487	25.1175	282.2986	0.7505	
3.0073	1.0530	25.1666	282.2025	0.7505	
3.0175	1.0551	25.1420	282.1384	0.7505	
3.0236	1.0594	25.1175	282.0102	0.7505	
3.0263	1.0615	25.1502	281.9674	0.7505	
2.8315	1.1252	25.1666	281.4006	0.7220	
2.8070	1.1273	25.1666	281.1758	0.7505	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X53.8300)

TEST 47	RUN 129	POINTS 80	PoNOM 25.0000	X(cm) 53.8300	Pref 14.7518
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.8009	1.1295	25.1420	281.2401	0.7505	
2.4595	1.2038	25.1666	281.1116	0.7220	
2.3615	1.2059	25.1420	281.0956	0.7363	
2.4105	1.2080	25.1666	281.1437	0.7505	
2.1040	1.2909	25.1420	281.0394	0.7505	
1.9813	1.3673	25.1666	280.9189	0.7505	
1.9486	1.3716	25.1502	280.8118	0.7505	
1.8914	1.4502	25.1666	280.6618	0.7505	
1.9097	1.4523	25.1666	280.7261	0.7505	
1.8914	1.4544	25.1175	280.6618	0.7505	
1.8914	1.5309	25.1666	280.5333	0.7505	
1.8873	1.5330	25.1339	280.4690	0.7410	
1.8832	1.6052	25.1666	280.4368	0.7505	
1.8853	1.6074	25.1175	280.2439	0.7505	
1.8873	1.6095	25.1666	280.3404	0.7505	
1.8914	1.6796	25.1666	280.3725	0.7505	
1.8955	1.6817	25.1175	280.3564	0.7363	
1.8914	1.6838	25.1175	280.3404	0.7505	
1.8969	1.7539	25.1339	280.0080	0.7410	
1.8914	1.7560	25.1666	280.1796	0.7220	
1.8996	1.8240	25.1175	279.9221	0.7505	
1.8982	1.8261	25.1502	279.8363	0.7505	
1.8955	1.8877	25.1175	279.7291	0.7220	
1.9036	1.9451	25.1666	279.5037	0.7220	
1.9037	1.9493	25.1175	279.4232	0.7505	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 128	POINTS 82	PoNOM 25.0000	X(cm) 54.4650	Pref 14.7511
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.9581	0.1503	25.2053	299.9541	0.7603	
2.9489	0.1566	25.2298	296.3558	0.7673	
2.9530	0.1588	25.1807	296.6059	0.7673	
2.9571	0.1609	25.1807	296.1994	0.7673	
2.9327	0.1651	25.2298	294.2253	0.7673	
2.9388	0.1673	25.2052	294.9468	0.7532	
2.9206	0.1694	25.1807	294.0369	0.7673	
2.9206	0.1736	25.2298	293.2828	0.7673	
2.9246	0.1758	25.2052	292.8424	0.7673	
2.9084	0.1821	25.1807	292.2443	0.7673	
2.9043	0.1843	25.1807	292.3073	0.7673	
2.9043	0.1864	25.2298	292.0867	0.7673	
2.8881	0.1906	25.1315	291.4562	0.7673	
2.8922	0.1928	25.1807	291.2827	0.7673	
2.8678	0.1970	25.1807	290.7302	0.7673	
2.8739	0.1991	25.2052	290.5249	0.7673	
2.8191	0.2140	25.2298	289.9717	0.7673	
2.8273	0.2161	25.1807	290.2089	0.7673	
2.7502	0.2480	25.1807	289.5920	0.7673	
2.7340	0.2501	25.1807	289.0854	0.7673	
2.7421	0.2522	25.2298	289.2755	0.7673	
2.6772	0.2777	25.1807	288.7686	0.7673	
2.6488	0.2820	25.2052	288.5626	0.7673	
2.5568	0.3117	25.1971	288.2719	0.7673	
2.4541	0.3436	25.1807	287.7059	0.7673	
2.4825	0.3457	25.2298	287.8488	0.7673	
2.3770	0.3754	25.1807	287.4995	0.7673	
2.3527	0.3797	25.1807	287.5630	0.7673	
2.2796	0.4094	25.1807	287.2135	0.7673	
2.2655	0.4115	25.1807	287.1818	0.7673	
2.1742	0.4434	25.1807	286.7684	0.7673	
2.1802	0.4455	25.1807	286.6888	0.7532	
2.0079	0.4859	25.1807	286.1638	0.7673	
2.0140	0.4880	25.1807	286.0842	0.7673	
1.8781	0.5284	25.1807	286.0046	0.7673	
1.8274	0.5326	25.1807	285.7816	0.7673	
1.7185	0.5751	25.1807	285.4949	0.7673	
1.6469	0.6197	25.1807	285.2717	0.7673	
1.6286	0.6218	25.1807	285.1442	0.7673	
1.6123	0.6622	25.1807	284.7453	0.7673	
1.6144	0.6643	25.1807	284.7932	0.7673	
1.6144	0.6664	25.1807	284.7932	0.7673	
1.6509	0.7323	25.1807	284.2824	0.7673	
1.6671	0.7344	25.1807	284.2185	0.7673	
1.6793	0.7365	25.1807	284.1546	0.7673	
1.7604	0.8024	25.1807	283.9735	0.7579	
1.9024	0.8767	25.1807	284.0268	0.7673	
1.8943	0.8788	25.1807	283.9469	0.7673	
2.0484	0.9468	25.1971	283.5473	0.7673	
2.1661	0.9871	25.1807	283.3073	0.7673	
2.1701	0.9893	25.1807	283.3553	0.7673	
2.2431	1.0254	25.1315	283.0034	0.7673	
2.2756	1.0275	25.1807	283.1314	0.7673	
2.4135	1.0870	25.1807	283.0353	0.7673	
2.4703	1.0891	25.2052	282.9553	0.7673	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X54.4650)

TEST 47	RUN 128	POINTS 82	PoNOM 25.0000	X(cm) 54.4650	Pref 14.7511
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.6326	1.1549	25.1807	282.7472	0.7673	
2.6711	1.1571	25.1807	282.4749	0.7673	
2.8313	1.2144	25.1807	282.0422	0.7673	
2.8212	1.2165	25.1807	282.1223	0.7673	
2.7786	1.2803	25.1807	281.7856	0.7673	
2.7705	1.2824	25.1807	281.7856	0.7673	
2.7907	1.2845	25.1807	281.8819	0.7391	
2.5393	1.3567	25.1807	281.6573	0.7673	
2.5109	1.3588	25.1807	281.6894	0.7673	
2.2634	1.4289	25.2298	281.5290	0.7673	
2.2066	1.4311	25.1807	281.3364	0.7673	
2.1985	1.4332	25.1315	281.5610	0.7673	
2.0626	1.5054	25.1807	281.3685	0.7673	
2.0322	1.5075	25.1315	281.3685	0.7673	
1.9484	1.5776	25.1807	281.3899	0.7673	
1.9186	1.6520	25.1807	281.2722	0.7673	
1.9085	1.6562	25.1807	281.0153	0.7673	
1.9024	1.7221	25.1807	280.9832	0.7673	
1.8943	1.7242	25.1807	281.0474	0.7673	
1.8983	1.7263	25.1807	281.0474	0.7673	
1.8902	1.7879	25.1807	281.0474	0.7673	
1.8902	1.7943	25.1315	280.9510	0.7673	
1.8902	1.7964	25.1315	280.9189	0.7673	
1.8882	1.8622	25.1561	280.7743	0.7673	
1.8781	1.8644	25.1807	280.7582	0.7673	
1.8902	1.9260	25.1807	280.4047	0.7673	
1.8902	1.9281	25.1807	280.3082	0.7673	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 127	POINTS 84	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7406
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.5089	0.1503	25.1539	299.3185	0.7463	
3.5318	0.1524	25.1866	298.4988	0.7463	
3.5291	0.1588	25.2030	297.6364	0.7463	
3.5372	0.1609	25.1784	297.2774	0.7463	
3.5089	0.1651	25.2030	296.5121	0.7463	
3.5089	0.1694	25.1539	296.0742	0.7463	
3.5009	0.1758	25.2030	295.3542	0.7463	
3.4929	0.1779	25.1784	295.1662	0.7603	
3.4707	0.1864	25.1784	294.0840	0.7463	
3.4767	0.1885	25.2030	294.0683	0.7463	
3.4263	0.2076	25.1784	293.7543	0.7603	
3.4283	0.2097	25.2030	293.7543	0.7463	
3.3881	0.2289	25.1784	292.8110	0.7323	
3.3638	0.2310	25.2030	292.6851	0.7463	
3.3256	0.2522	25.1784	292.2285	0.7463	
3.3155	0.2544	25.1539	292.0867	0.7463	
3.2792	0.2735	25.1539	291.7400	0.7463	
3.2591	0.2756	25.1784	291.5035	0.7463	
3.2006	0.3096	25.2030	290.9986	0.7323	
3.1865	0.3117	25.1539	290.9513	0.7463	
3.1462	0.3457	25.1784	290.3511	0.7323	
3.1381	0.3478	25.1539	290.3511	0.7463	
3.1059	0.3818	25.1539	289.9401	0.7463	
3.0898	0.3839	25.1539	289.8135	0.7603	
3.0415	0.4243	25.2030	289.3230	0.7463	
3.0414	0.4264	25.1539	289.2755	0.7183	
2.9286	0.4710	25.2030	289.1488	0.7463	
2.9145	0.4731	25.2030	288.9746	0.7463	
2.7633	0.5220	25.2030	288.6418	0.7463	
2.7251	0.5241	25.2276	288.4516	0.7463	
2.5820	0.5708	25.1539	288.2613	0.7463	
2.4732	0.5730	25.2030	288.1027	0.7323	
2.2837	0.6218	25.2030	287.7853	0.7463	
2.1951	0.6261	25.1784	287.5789	0.7463	
2.0238	0.6728	25.1784	287.2930	0.7463	
1.9572	0.6749	25.2030	287.3088	0.7463	
1.8605	0.7195	25.1539	286.9274	0.7463	
1.8262	0.7238	25.1784	286.8002	0.7603	
1.7880	0.7684	25.2030	286.7684	0.7463	
1.7819	0.7726	25.1784	286.7843	0.7603	
1.7920	0.8215	25.1539	286.6412	0.7463	
1.8121	0.8236	25.1866	286.4185	0.7463	
1.8672	0.8746	25.2030	286.2487	0.7463	
1.9169	0.9234	25.1539	285.9728	0.7463	
1.9432	0.9255	25.2030	285.8135	0.7463	
1.9975	0.9723	25.1539	285.6224	0.7183	
2.0238	0.9765	25.1539	285.4630	0.7463	
2.1225	1.0381	25.1866	285.1654	0.7556	
2.1547	1.0487	25.1539	284.9847	0.7463	
2.1668	1.0509	25.1539	284.7294	0.7463	
2.1628	1.0530	25.1539	284.8251	0.7463	
2.3019	1.1422	25.2030	284.5698	0.7463	
2.3300	1.1464	25.1784	284.4261	0.7603	
2.4248	1.1974	25.1539	284.3462	0.7463	
2.4711	1.1995	25.1784	284.4580	0.7463	



**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X55.1000)

TEST 47	RUN 127	POINTS 84	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7406
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.4691	1.2017	25.2030	284.3782	0.7743	
2.5900	1.2569	25.1866	284.1759	0.7370	
2.6142	1.2590	25.2030	284.0907	0.7463	
2.7203	1.3142	25.1703	283.7924	0.7463	
2.8036	1.3631	25.2030	283.6432	0.7463	
2.8439	1.3673	25.2030	283.6112	0.7463	
2.8520	1.3695	25.2030	283.6752	0.7743	
2.8721	1.4311	25.2030	283.6432	0.7463	
2.8883	1.4332	25.2030	283.6432	0.7463	
2.8842	1.4353	25.2030	283.5153	0.7463	
2.7694	1.4990	25.1784	283.2593	0.7463	
2.7431	1.5012	25.1539	283.2433	0.7463	
2.6182	1.5606	25.1539	283.2593	0.7463	
2.4893	1.5628	25.2030	283.0034	0.7463	
2.5316	1.5649	25.1784	283.0834	0.7463	
2.3563	1.6286	25.2030	283.0674	0.7743	
2.3159	1.6328	25.1784	282.9873	0.7603	
2.3079	1.6350	25.1539	283.0674	0.7463	
2.2434	1.6881	25.2030	282.7792	0.7463	
2.2354	1.6923	25.2030	282.6991	0.7463	
2.1991	1.6944	25.2030	282.6831	0.7463	
2.1507	1.7497	25.2030	282.5229	0.7743	
2.1413	1.7539	25.1866	282.6617	0.7463	
2.1265	1.8070	25.2030	282.3948	0.7463	
2.1198	1.8113	25.2030	282.3948	0.7556	
2.1104	1.8644	25.1539	282.3307	0.7463	
2.1104	1.8665	25.2030	282.3628	0.7183	
2.1044	1.8686	25.1784	282.1865	0.7603	
2.1104	1.9175	25.2030	282.1063	0.7463	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 126	POINTS 81	PoNOM 25.0000	X(cm) 56.3700	Pref 14.7295
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
4.3246	0.1503	24.9612	296.9911	0.7464	
4.3577	0.1566	25.1087	295.4637	0.7464	
4.3476	0.1588	25.1087	295.5735	0.7464	
4.3435	0.1630	25.1087	294.4450	0.7464	
4.3557	0.1651	25.1087	294.2567	0.7464	
4.3476	0.1673	25.1087	294.0056	0.7747	
4.3232	0.1843	25.1087	293.6600	0.7747	
4.3273	0.1864	25.1087	293.5343	0.7747	
4.3151	0.1885	25.0596	293.1885	0.7464	
4.2786	0.2034	25.1087	292.5592	0.7464	
4.2827	0.2055	25.1087	292.5592	0.7747	
4.2867	0.2076	25.0596	292.2128	0.7464	
4.2380	0.2374	25.1087	291.7715	0.7653	
4.2177	0.2671	25.1087	291.2669	0.7464	
4.2076	0.2692	25.1087	291.0934	0.7747	
4.2015	0.2968	25.1087	290.7618	0.7747	
4.2076	0.2990	25.1087	290.4459	0.7606	
4.2096	0.3329	25.1087	290.0560	0.7558	
4.2218	0.3648	25.1087	289.6237	0.7464	
4.2197	0.3691	25.1087	289.3547	0.7747	
4.1920	0.4158	25.1087	288.8426	0.7653	
4.1812	0.4583	25.0596	288.4040	0.7606	
4.1690	0.4604	25.1087	288.1027	0.7747	
4.1265	0.5029	25.0842	288.0551	0.7606	
4.1203	0.5050	25.0596	287.9757	0.7747	
4.0676	0.5453	25.1087	287.6265	0.7747	
4.0757	0.5475	25.0596	287.5789	0.7606	
4.0351	0.5921	25.1087	287.1500	0.7464	
4.0168	0.5942	25.0842	286.9751	0.7606	
3.9580	0.6388	25.0923	286.5988	0.7558	
3.9215	0.6792	25.0596	286.4503	0.7747	
3.9053	0.6813	25.0842	286.3549	0.7606	
3.8065	0.7408	25.0923	286.0153	0.7653	
3.6821	0.7960	25.0596	285.8454	0.7464	
3.6862	0.7981	25.0842	285.7976	0.7606	
3.4609	0.8533	25.1087	285.2717	0.7606	
3.4508	0.8555	25.1087	285.2398	0.7464	
3.0856	0.9128	25.1087	285.0963	0.7747	
3.0368	0.9170	25.0596	285.0485	0.7464	
2.7609	0.9744	25.1087	284.9048	0.7606	
2.6108	0.9765	25.0596	284.8571	0.7747	
2.4322	1.0296	25.0596	284.6336	0.7747	
2.3673	1.0317	25.1087	284.5379	0.7747	
2.3795	1.0339	25.1087	284.6336	0.7464	
2.3186	1.0402	25.1087	284.4101	0.7747	
2.2982	1.0466	25.1087	284.3942	0.7606	
2.2902	1.0636	25.1087	283.8670	0.7747	
2.2598	1.0657	25.1087	283.9309	0.7747	
2.2496	1.1146	25.0596	283.8670	0.7747	
2.2455	1.1167	25.1087	283.8990	0.7464	
2.2537	1.1188	25.1087	283.8031	0.7747	
2.3023	1.1804	25.1087	283.6112	0.7747	
2.2739	1.1826	25.1087	283.6432	0.7747	
2.3023	1.1868	25.1087	283.4193	0.7464	
2.3470	1.2484	25.0596	283.1954	0.7747	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X56.3700)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>126</b>	<b>POINTS</b> <b>81</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>56.3700</b>	<b>Pref</b> <b>14.7295</b>
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
2.3856	1.2505		25.1087	283.0994	0.7747
2.4579	1.3164		25.0923	283.0247	0.7653
2.5337	1.3758		25.1087	282.9393	0.7747
2.5539	1.3801		25.1087	282.8112	0.7464
2.5580	1.3822		25.1087	282.6511	0.7747
2.6351	1.4438		25.1087	282.5390	0.7747
2.6432	1.4459		25.1087	282.5550	0.7464
2.7244	1.5097		25.1087	282.4108	0.7606
2.7406	1.5118		25.1087	282.3628	0.7747
2.8055	1.5712		25.0596	282.0743	0.7747
2.8238	1.5755		25.1087	281.9941	0.7747
2.8948	1.6350		25.1087	281.9139	0.7747
2.9232	1.6413		25.1087	281.7536	0.7747
2.9313	1.6435		25.1087	281.7536	0.7747
3.0003	1.6966		25.1087	281.5931	0.7606
3.0166	1.6987		25.1087	281.5932	0.7747
3.0531	1.7582		25.1087	281.4969	0.7747
3.0653	1.7645		25.1087	281.4006	0.7747
3.0693	1.7667		25.1087	281.4969	0.7464
3.0653	1.8134		25.0596	281.2722	0.7464
3.0409	1.8198		25.1087	281.2079	0.7747
3.0531	1.8219		25.1087	281.2079	0.7747
2.9395	1.8729		25.1087	281.2401	0.7747
2.9313	1.8771		25.1087	281.2079	0.7747
2.9151	1.8792		25.1087	281.1758	0.7464
2.8177	1.9281		25.1087	281.0795	0.7747

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 125	POINTS 86	PoNOM 25.0000	X(cm) 57.6400	Pref 14.7295
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
4.3829	0.1503	24.9528	301.3366	0.7389	
4.3802	0.1524	24.9364	300.4991	0.7295	
4.3789	0.1566	24.9528	299.5362	0.7107	
4.3748	0.1588	24.9528	298.9763	0.7389	
4.3789	0.1609	24.9528	299.3807	0.7389	
4.3748	0.1651	24.9528	298.4158	0.7389	
4.3708	0.1673	24.9528	297.9067	0.7295	
4.3668	0.1758	24.9528	297.5740	0.7389	
4.3654	0.1779	24.9364	296.8246	0.7483	
4.3547	0.1843	24.9528	296.1056	0.7389	
4.3527	0.1864	24.9283	295.6987	0.7389	
4.3506	0.1949	24.9283	295.2916	0.7389	
4.3547	0.1970	24.9528	295.1976	0.7389	
4.3426	0.2119	24.9283	294.8685	0.7389	
4.3426	0.2140	24.9528	294.5705	0.7389	
4.3385	0.2310	24.9528	294.1625	0.7389	
4.3385	0.2352	24.9283	294.0841	0.7389	
4.3426	0.2650	24.9528	293.5971	0.7389	
4.3345	0.2692	24.9528	293.4400	0.7248	
4.3224	0.2947	24.9037	293.0627	0.7389	
4.3224	0.2990	24.9528	292.9369	0.7389	
4.3264	0.3011	24.9528	292.8424	0.7389	
4.3103	0.3287	24.9528	292.4017	0.7389	
4.3123	0.3308	24.9283	292.2758	0.7248	
4.3022	0.3648	24.9528	291.9607	0.7389	
4.3009	0.3669	24.9528	291.8241	0.7389	
4.2942	0.3988	24.9528	291.1723	0.7248	
4.2942	0.4009	24.9528	291.0302	0.7389	
4.2821	0.4455	24.9528	290.8881	0.7389	
4.2861	0.4476	24.9528	290.7776	0.7389	
4.2680	0.4901	24.9528	290.5565	0.7389	
4.2659	0.4922	24.9528	290.6039	0.7389	
4.2498	0.5347	24.9528	290.1772	0.7389	
4.2417	0.5390	24.9528	290.1931	0.7107	
4.2256	0.5857	24.9037	289.9401	0.7107	
4.2256	0.5878	24.9528	289.9243	0.7389	
4.2095	0.6324	24.9528	289.5287	0.7389	
4.2095	0.6367	24.9528	289.4021	0.7389	
4.2014	0.6388	24.9528	289.4655	0.7389	
4.1705	0.6919	24.9364	289.0432	0.7389	
4.1369	0.7493	24.9528	288.9587	0.7389	
4.1288	0.7535	24.9528	288.9904	0.7389	
4.1167	0.7556	24.9528	289.0221	0.7389	
4.0885	0.8108	24.9528	288.7369	0.7389	
4.0844	0.8130	24.9528	288.5784	0.7389	
4.0844	0.8151	24.9528	288.6736	0.7389	
4.0420	0.8703	24.9528	288.2772	0.7389	
4.0360	0.8746	24.9037	288.1661	0.7389	
3.9997	0.9255	24.9528	287.9440	0.7389	
3.9876	0.9277	24.9528	287.8170	0.7389	
3.9876	0.9319	24.9528	287.7377	0.7389	
3.9876	0.9340	24.9364	287.5207	0.7483	
3.9755	0.9447	24.9528	287.1817	0.7248	
3.9715	0.9489	24.9528	287.1182	0.7389	
3.9150	1.0063	24.9528	287.0228	0.7389	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X57.6400)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>125</b>	<b>POINTS</b> <b>86</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>57.6400</b>	<b>Pref</b> <b>14.7295</b>
<b>P(psi)</b>	<b>Y(cm)</b>	<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>	
3.9211	1.0084	24.9528	286.9751	0.7389	
3.8303	1.0764	24.9528	286.5776	0.7389	
3.8384	1.0785	24.9528	286.6094	0.7389	
3.7537	1.1443	24.9528	286.4821	0.7389	
3.7255	1.1507	24.9528	286.3548	0.7248	
3.5439	1.2208	24.9528	286.1957	0.7389	
3.4754	1.2229	24.9528	286.0683	0.7389	
3.4875	1.2250	24.9528	286.1002	0.7389	
3.0296	1.2994	24.9528	286.1002	0.7389	
2.9188	1.3036	24.9037	286.0046	0.7389	
2.5638	1.3780	24.9528	286.0046	0.7389	
2.4670	1.3822	24.9528	285.8613	0.7389	
2.3178	1.4566	24.9528	285.6224	0.7389	
2.3259	1.4587	24.9528	285.6861	0.7389	
2.3016	1.5330	25.0019	285.3992	0.7389	
2.3057	1.5351	25.0019	285.3992	0.7389	
2.3057	1.5373	25.0019	285.3036	0.7389	
2.3460	1.6052	24.9528	285.1122	0.7389	
2.3420	1.6074	24.9528	285.1442	0.7389	
2.3500	1.6116	24.9528	285.0165	0.7671	
2.3904	1.6753	25.0019	284.9528	0.7389	
2.4025	1.6796	24.9528	284.8571	0.7389	
2.4267	1.7412	24.9528	284.6974	0.7107	
2.4509	1.7454	24.9528	284.4740	0.7389	
2.4428	1.7475	24.9528	284.6656	0.7389	
2.4791	1.8070	24.9037	284.5379	0.7107	
2.4932	1.8134	24.9528	284.3462	0.7389	
2.5194	1.8665	24.9528	284.3782	0.7107	
2.5416	1.8729	24.9528	284.2984	0.7389	
2.5759	1.9260	24.9528	284.1226	0.7107	
2.5880	1.9281	24.9528	283.9629	0.7389	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 122	POINTS 68	PoNOM 25.0000	X(cm) 58.9100	Pref 14.7118
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
4.2867	0.1439	25.3230	291.1880	0.8148	
4.3021	0.1460	25.3393	290.3824	0.8007	
4.2907	0.1609	25.3230	288.8002	0.8148	
4.2927	0.1630	25.2739	288.8637	0.8289	
4.2847	0.1715	25.2739	287.9651	0.8195	
4.2807	0.1779	25.2903	286.8320	0.8195	
4.2585	0.1970	25.2739	286.0365	0.8148	
4.2525	0.1991	25.2739	285.7498	0.8007	
4.2283	0.2161	25.2739	285.4630	0.8289	
4.2263	0.2182	25.2739	285.3195	0.8148	
4.2054	0.2374	25.2575	284.7613	0.8289	
4.1920	0.2544	25.2248	283.9629	0.8289	
4.1920	0.2565	25.2248	284.3143	0.8289	
4.1880	0.2586	25.2248	283.9948	0.8289	
4.1772	0.2777	25.2412	283.3553	0.8195	
4.1706	0.2968	25.2248	282.9607	0.8101	
4.1638	0.3308	25.2248	282.8112	0.8289	
4.1659	0.3329	25.2248	282.7472	0.8007	
4.1618	0.3648	25.2248	282.1544	0.8289	
4.1598	0.3669	25.2739	282.2666	0.8007	
4.1558	0.4009	25.2412	281.8284	0.8289	
4.1437	0.4349	25.2003	281.2401	0.8148	
4.1397	0.4370	25.2248	281.3043	0.8289	
4.1343	0.4710	25.2248	280.8011	0.8195	
4.1235	0.5050	25.2248	280.7743	0.8148	
4.1235	0.5071	25.2248	280.6940	0.8007	
4.1074	0.5390	25.2248	280.1474	0.8289	
4.1054	0.5411	25.2003	280.2760	0.8148	
4.0913	0.5857	25.2248	279.8578	0.8007	
4.0913	0.5878	25.2003	279.9061	0.8148	
4.0631	0.6303	25.1757	279.6325	0.8007	
4.0691	0.6324	25.2003	279.6486	0.8007	
4.0470	0.6749	25.1757	279.1816	0.8289	
4.0470	0.6770	25.1757	279.3104	0.8007	
4.0470	0.6792	25.2248	279.3104	0.8289	
4.0309	0.7216	25.2248	279.0527	0.8289	
4.0289	0.7238	25.2248	279.1011	0.8007	
4.0040	0.7832	25.2248	278.8270	0.8101	
3.9785	0.8470	25.1757	278.7625	0.8007	
3.9765	0.8491	25.2003	278.7303	0.8148	
3.9503	0.9086	25.2248	278.2787	0.8289	
3.9503	0.9107	25.1757	278.3271	0.8289	
3.9181	0.9723	25.1757	278.1604	0.8195	
3.8959	1.0211	25.2003	277.6007	0.8007	
3.9010	1.0232	25.2003	277.7864	0.8219	
3.8858	1.0445	25.1757	277.2344	0.8195	
3.8576	1.1146	25.1757	277.0512	0.8007	
3.8617	1.1167	25.1757	277.1644	0.8007	
3.8254	1.1783	25.1757	277.0189	0.8007	
3.8234	1.1804	25.1757	277.1482	0.8148	
3.7945	1.2484	25.1921	276.7925	0.8195	
3.7610	1.3142	25.1757	276.7278	0.8289	
3.7670	1.3164	25.1757	276.7440	0.8148	
3.7267	1.3950	25.1757	276.7278	0.8148	
3.7328	1.3971	25.2248	276.7278	0.8007	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X58.9100)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>122</b>	<b>POINTS</b> <b>68</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>58.9100</b>	<b>Pref</b> <b>14.7118</b>
<b>P(psi)</b>	<b>Y(cm)</b>	<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>	
3.6804	1.4735	25.1757	276.5013	0.8289	
3.6844	1.4757	25.1757	276.4365	0.8289	
3.6079	1.5500	25.1757	276.5013	0.8289	
3.6059	1.5521	25.1757	276.4366	0.8007	
3.3783	1.6286	25.1511	276.4365	0.8148	
3.3379	1.6307	25.1757	276.4365	0.8289	
2.8478	1.6987	25.1593	276.4257	0.8289	
2.4094	1.7688	25.1757	276.1775	0.8148	
2.3751	1.7709	25.1757	276.1127	0.8289	
2.2663	1.8389	25.1757	276.1775	0.8007	
2.2543	1.8410	25.1757	276.1451	0.8289	
2.2603	1.9005	25.1511	276.0965	0.8148	
2.2663	1.9026	25.1757	275.8860	0.8007	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 121	POINTS 71	PoNOM 25.0000	X(cm) 60.1800	Pref 14.7062
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.8787	0.1397	25.2746	293.3457	0.8501	
3.8907	0.1418	25.2746	292.8110	0.8782	
3.8626	0.1439	25.2255	294.3822	0.8501	
3.8907	0.1482	25.2746	291.9764	0.8641	
3.8746	0.1566	25.2255	290.8092	0.8501	
3.8646	0.1651	25.2255	289.8294	0.8501	
3.8666	0.1673	25.2746	289.3388	0.8501	
3.8304	0.1821	25.2255	288.5784	0.8501	
3.8384	0.1843	25.2255	288.4991	0.8501	
3.8002	0.1991	25.2010	287.8329	0.8641	
3.8022	0.2013	25.2255	287.9123	0.8501	
3.7801	0.2182	25.2255	287.1658	0.8501	
3.7821	0.2204	25.2255	286.9592	0.8782	
3.7720	0.2374	25.1764	286.3549	0.8501	
3.7659	0.2565	25.2010	285.9568	0.8501	
3.7659	0.2756	25.1518	285.4471	0.8361	
3.7606	0.3075	25.1764	284.9421	0.8501	
3.7599	0.3393	25.1764	284.7134	0.8501	
3.7559	0.3733	25.1764	284.3303	0.8501	
3.7552	0.4094	25.1764	283.3660	0.8501	
3.7458	0.4391	25.1764	283.0034	0.8501	
3.7478	0.4413	25.1764	283.1474	0.8501	
3.7364	0.4731	25.1436	282.5123	0.8595	
3.7317	0.5050	25.1518	282.1865	0.8501	
3.7297	0.5071	25.1764	282.2025	0.8501	
3.7217	0.5347	25.1764	281.9460	0.8501	
3.7257	0.5368	25.1764	281.9460	0.8501	
3.7176	0.5708	25.1764	281.5076	0.8501	
3.7156	0.6006	25.1764	281.1277	0.8501	
3.7136	0.6027	25.1764	281.0153	0.8501	
3.7056	0.6346	25.1272	280.8867	0.8501	
3.7056	0.6367	25.1764	280.9510	0.8782	
3.6975	0.6749	25.1764	280.5011	0.8782	
3.6975	0.6770	25.1436	280.5119	0.8501	
3.6895	0.7216	25.1600	280.3189	0.8501	
3.6747	0.7684	25.1436	279.9115	0.8501	
3.6653	0.8130	25.1518	279.6164	0.8501	
3.6492	0.8618	25.1272	279.2299	0.8501	
3.6492	0.8639	25.1272	279.2782	0.8501	
3.6331	0.9043	25.1272	279.0204	0.8501	
3.6331	0.9064	25.1272	278.8915	0.8641	
3.6109	0.9510	25.1764	278.6497	0.8501	
3.6089	0.9532	25.1272	278.6336	0.8501	
3.5848	0.9956	25.1272	278.3593	0.8501	
3.5566	1.0445	25.1272	278.2465	0.8501	
3.5204	1.0976	25.1272	278.2465	0.8501	
3.5204	1.0997	25.1272	278.0528	0.8501	
3.4841	1.1401	25.1272	277.9129	0.8501	
3.4358	1.1868	25.1272	277.4714	0.8501	
3.4439	1.1889	25.1518	277.6007	0.8361	
3.3915	1.2441	25.1272	277.3583	0.8501	
3.3956	1.2463	25.1272	277.2775	0.8782	
3.3432	1.2994	25.1272	277.1482	0.8501	
3.3453	1.3015	25.1272	277.2614	0.8641	
3.2909	1.3546	25.1436	277.2129	0.8501	



**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X60.1800)

TEST 47	RUN 121	POINTS 71	PoNOM 25.0000	X(cm) 60.1800	Pref 14.7062
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.2406	1.4141	25.1518	277.0836	0.8501	
3.1876	1.4672	25.1436	276.9219	0.8501	
3.1352	1.5245	25.1272	276.8357	0.8501	
3.0883	1.5734	25.1436	276.7062	0.8501	
3.0413	1.6265	25.1272	276.6631	0.8501	
3.0333	1.6286	25.1272	276.6954	0.8501	
2.9849	1.6774	25.1108	276.5552	0.8501	
2.9105	1.7369	25.1272	276.3718	0.8361	
2.9205	1.7390	25.1272	276.4041	0.8501	
2.8521	1.7943	25.0781	276.1451	0.8782	
2.8581	1.7964	25.1272	276.2099	0.8501	
2.7977	1.8537	25.1272	276.0804	0.8501	
2.7514	1.9005	25.1272	276.1775	0.8782	
2.7495	1.9026	25.1272	276.1613	0.8501	
2.6991	1.9493	25.1272	276.1127	0.8501	
2.6992	1.9514	25.1518	276.0804	0.8641	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 120	POINTS 79	PoNOM 25.0000	X(cm) 61.4500	Pref 14.7000
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
3.3723	0.1418	25.2549	296.3557	0.8832	
3.3642	0.1439	25.2549	297.0121	0.8553	
3.3702	0.1460	25.2549	295.1819	0.8692	
3.3522	0.1566	25.2059	293.8170	0.8553	
3.3602	0.1588	25.2059	294.0683	0.8553	
3.3361	0.1651	25.2059	292.9578	0.8832	
3.3121	0.1736	25.2059	292.1655	0.8692	
3.3081	0.1758	25.2059	291.6770	0.8553	
3.2960	0.1821	25.2059	291.0776	0.8553	
3.2960	0.1843	25.2059	291.5193	0.8832	
3.2840	0.1906	25.1814	290.6987	0.8692	
3.2760	0.1928	25.2059	290.4459	0.8832	
3.2760	0.1970	25.2059	289.7819	0.8553	
3.2680	0.1991	25.1814	289.5446	0.8832	
3.2579	0.2182	25.2059	288.9428	0.8832	
3.2639	0.2204	25.1568	289.1488	0.8553	
3.2546	0.2374	25.2059	288.3670	0.8646	
3.2412	0.2565	25.1568	287.7642	0.8739	
3.2298	0.2777	25.1568	287.2453	0.8832	
3.2278	0.2798	25.1568	287.1182	0.8553	
3.2218	0.2968	25.1814	286.7525	0.8832	
3.2198	0.2990	25.2059	286.6094	0.8553	
3.2118	0.3181	25.1568	286.1002	0.8553	
3.2138	0.3202	25.1568	286.1797	0.8553	
3.1998	0.3372	25.1568	285.8454	0.8274	
3.2038	0.3393	25.1568	285.9409	0.8553	
3.2038	0.3414	25.1568	285.6542	0.8832	
3.1904	0.3606	25.1732	285.1867	0.8646	
3.1757	0.3818	25.1568	284.9527	0.8553	
3.1717	0.3839	25.1077	284.7613	0.8832	
3.1556	0.4158	25.1077	284.5698	0.8553	
3.1616	0.4179	25.1322	284.5379	0.8692	
3.1396	0.4476	25.1568	283.9948	0.8832	
3.1396	0.4498	25.1568	283.9789	0.8553	
3.1195	0.4837	25.1568	283.8351	0.8692	
3.0894	0.5305	25.1322	283.4513	0.8692	
3.0874	0.5326	25.1568	283.4193	0.8553	
3.0634	0.5772	25.1077	283.2274	0.8832	
3.0674	0.5793	25.1077	283.2274	0.8553	
3.0273	0.6261	25.1241	283.0674	0.8739	
3.0005	0.6707	25.1404	282.7578	0.8739	
2.9771	0.7174	25.1322	282.5870	0.8692	
2.9390	0.7662	25.1568	282.2506	0.8832	
2.9390	0.7684	25.1568	282.0422	0.8553	
2.9069	0.8108	25.1077	281.8337	0.8553	
2.8748	0.8746	25.1322	281.6734	0.8692	
2.8327	0.9340	25.1322	281.4969	0.8692	
2.7886	0.9893	25.1077	281.2079	0.8692	
2.7825	0.9914	25.1568	281.1116	0.8832	
2.7798	0.9978	25.1404	280.7475	0.8739	
2.7785	0.9999	25.1077	280.8761	0.8646	
2.7625	1.0360	25.1077	280.5333	0.8832	
2.7545	1.0381	25.1077	280.5333	0.8553	
2.7224	1.0891	25.1568	280.4047	0.8832	
2.7264	1.0912	25.1568	280.3725	0.8553	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X61.4500)

<b>TEST</b> 47	<b>RUN</b> 120	<b>POINTS</b> 79	<b>PoNOM</b> 25.0000	<b>X(cm)</b> 61.4500	<b>Pref</b> 14.7000
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
2.6863	1.1464		25.1568	280.2117	0.8553
2.6943	1.1486		25.1568	280.2117	0.8832
2.6421	1.2123		25.1077	280.0509	0.8692
2.5940	1.2803		25.1568	280.0026	0.8692
2.5479	1.3482		25.1322	279.8256	0.8553
2.5579	1.3503		25.1077	279.8900	0.8553
2.4977	1.4162		25.1077	279.6325	0.8553
2.5057	1.4183		25.1077	279.6003	0.8832
2.4496	1.4820		25.1322	279.3266	0.8553
2.4054	1.5458		25.1077	279.4071	0.8274
2.4075	1.5479		25.1077	279.3588	0.8553
2.3533	1.6095		25.1077	279.2782	0.8553
2.3573	1.6116		25.1077	279.1816	0.8553
2.3573	1.6137		25.1077	279.2138	0.8553
2.3132	1.6732		25.1322	279.1011	0.8832
2.2650	1.7305		25.1077	279.2783	0.8832
2.2269	1.7879		25.1077	279.0688	0.8692
2.1808	1.8431		25.1077	278.8808	0.8832
2.1407	1.8899		25.1077	278.6981	0.8692
2.1407	1.8920		25.1077	278.6336	0.8832
2.1066	1.9387		25.1322	278.2949	0.8832
2.1046	1.9408		25.1077	278.3755	0.8553
2.0705	1.9791		25.1322	278.3271	0.8553
2.0644	1.9812		25.1568	278.2465	0.8553

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 119	POINTS 71	PoNOM 25.0000	X(cm) 62.7200	Pref 14.6973
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.2774	0.1439	25.1347	292.1078	0.8530	
2.2413	0.1460	24.9219	292.3388	0.8158	
2.2834	0.1524	25.1675	290.8881	0.8437	
2.2774	0.1609	25.2166	290.3827	0.8437	
2.2774	0.1630	25.2166	290.5091	0.8437	
2.2654	0.1694	25.1675	289.8768	0.8437	
2.2734	0.1715	25.1675	289.9717	0.8717	
2.2654	0.1779	25.1675	289.1171	0.8717	
2.2674	0.1800	25.1675	289.4022	0.8577	
2.2681	0.1970	25.1675	288.8214	0.8624	
2.2694	0.2161	25.1675	288.4674	0.8577	
2.2694	0.2182	25.1675	288.4833	0.8717	
2.2667	0.2352	25.1675	287.7959	0.8624	
2.2681	0.2650	25.1511	287.3830	0.8624	
2.2674	0.2947	25.1675	287.0387	0.8717	
2.2654	0.2968	25.1184	286.9592	0.8717	
2.2707	0.3287	25.1348	286.7685	0.8624	
2.2654	0.3606	25.1184	286.2275	0.8717	
2.2674	0.3627	25.1430	286.5457	0.8577	
2.2641	0.3945	25.1511	286.0684	0.8624	
2.2574	0.4285	25.1184	285.8135	0.8437	
2.2614	0.4306	25.1675	285.7498	0.8437	
2.2574	0.4710	25.1184	285.3354	0.8717	
2.2574	0.5135	25.1184	285.0165	0.8437	
2.2534	0.5156	25.1430	285.0645	0.8437	
2.2454	0.5581	25.1184	284.7932	0.8717	
2.2454	0.5602	25.1675	284.8571	0.8437	
2.2454	0.5623	25.1184	284.9208	0.8158	
2.2413	0.6048	25.1184	284.6974	0.8717	
2.2434	0.6069	25.0938	284.3942	0.8437	
2.2333	0.6494	25.1184	283.9629	0.8577	
2.2333	0.6515	25.1184	283.8990	0.8717	
2.2293	0.6940	25.1184	283.5473	0.8624	
2.2213	0.7386	25.1184	283.3553	0.8437	
2.2173	0.7408	25.1184	283.2593	0.8717	
2.2073	0.7832	25.1184	282.9233	0.8577	
2.2053	0.7854	25.1184	282.9073	0.8437	
2.1933	0.8427	25.1184	282.8326	0.8624	
2.1746	0.9022	25.1184	282.4695	0.8437	
2.1252	1.0211	25.1348	282.3414	0.8530	
2.0971	1.0700	25.1184	281.9460	0.8717	
2.1011	1.0721	25.1184	282.1384	0.8577	
2.0851	1.0891	25.0692	281.7375	0.8577	
2.0881	1.0912	25.1061	281.8257	0.8507	
2.0771	1.1082	25.1184	281.6252	0.8717	
2.0798	1.1103	25.1020	281.5397	0.8530	
2.0571	1.1571	25.1020	281.1759	0.8530	
2.0290	1.2038	25.1020	281.0474	0.8530	
1.9997	1.2718	25.1184	280.8439	0.8530	
1.9676	1.3334	25.1184	280.5226	0.8624	
1.9369	1.3971	25.1184	280.3404	0.8577	
1.9409	1.3992	25.1184	280.2117	0.8717	
1.9008	1.4587	25.0692	279.9543	0.8437	
1.9008	1.4608	25.0938	279.9221	0.8717	
1.8634	1.5288	25.1184	279.7720	0.8530	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X62.7200)

TEST 47	RUN 119	POINTS 71	PoNOM 25.0000	X(cm) 62.7200	Pref 14.6973
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.8347	1.5904	25.1184	279.6486	0.8577	
1.8287	1.5925	25.1184	279.6968	0.8437	
1.7986	1.6520	25.1184	279.5359	0.8717	
1.7926	1.6541	25.0692	279.6325	0.8437	
1.7646	1.7072	25.1184	279.2138	0.8437	
1.7666	1.7093	25.0938	279.2943	0.8438	
1.7325	1.7603	25.1184	279.1171	0.8717	
1.7365	1.7624	25.1184	279.1494	0.8717	
1.7085	1.8134	25.1184	278.9237	0.8437	
1.7025	1.8155	25.1184	278.9882	0.8717	
1.6751	1.8665	25.1184	278.9882	0.8530	
1.6484	1.9090	25.1184	278.7948	0.8437	
1.6444	1.9111	25.0692	278.7625	0.8437	
1.6524	1.9132	25.0692	278.7948	0.8437	
1.6271	1.9578	25.1184	278.6658	0.8624	
1.6003	1.9918	25.1184	278.6336	0.8437	

TABLE 4 - STATIC PRESSURE WINDWARD

TEST 47	RUN 118	POINTS 79	PoNOM 25.0000	X(cm) 63.9900	Pref 14.6944
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7160	0.1439	24.9016	298.6260	0.8673	
1.7334	0.1460	24.9508	297.3087	0.8530	
1.7232	0.1588	24.9754	296.6527	0.8673	
1.7211	0.1694	24.9426	296.0951	0.8673	
1.7252	0.1779	24.9262	295.6987	0.8958	
1.7293	0.1800	24.9262	295.6987	0.8673	
1.7211	0.1864	24.9754	295.1349	0.8673	
1.7293	0.1885	24.9262	294.9782	0.8673	
1.7293	0.2076	24.9754	294.6332	0.8673	
1.7293	0.2097	24.9262	294.7274	0.8958	
1.7211	0.2267	24.9754	294.2567	0.8673	
1.7252	0.2289	24.9754	294.2253	0.8388	
1.7211	0.2459	24.9754	293.8485	0.8673	
1.7252	0.2480	24.9262	293.7857	0.8958	
1.7279	0.2692	24.9754	293.3457	0.8673	
1.7334	0.2926	24.9754	292.7323	0.8816	
1.7293	0.3117	24.9754	292.4332	0.8673	
1.7252	0.3138	24.9754	292.3388	0.8673	
1.7252	0.3457	24.9426	292.0868	0.8673	
1.7238	0.3818	24.9590	291.4773	0.8673	
1.7252	0.3839	24.9262	291.5508	0.8673	
1.7211	0.4179	24.9754	290.4301	0.8816	
1.7201	0.4200	24.9508	290.6671	0.8602	
1.7211	0.4519	24.9754	290.0824	0.8673	
1.7211	0.4837	24.9754	289.7503	0.8673	
1.7170	0.4859	24.9754	289.6237	0.8673	
1.7211	0.4880	24.9754	289.7819	0.8673	
1.7170	0.5199	24.9754	289.2597	0.8530	
1.7129	0.5560	24.9590	288.9270	0.8768	
1.7088	0.6006	24.9754	288.8320	0.8673	
1.7068	0.6027	24.9754	288.7052	0.8530	
1.7006	0.6473	24.9754	288.5150	0.8388	
1.7027	0.6494	24.9754	288.5943	0.8816	
1.6966	0.6940	24.9508	288.0710	0.8673	
1.6925	0.6962	24.9754	288.1661	0.8673	
1.6898	0.7429	24.9754	287.8488	0.8673	
1.6823	0.7875	24.9754	287.5789	0.8673	
1.6843	0.7896	24.9754	287.6583	0.8673	
1.6802	0.8470	24.9754	287.3088	0.8673	
1.6741	0.8491	24.9754	287.3089	0.8958	
1.6652	0.9064	24.9754	286.9804	0.8768	
1.6474	0.9659	24.9754	286.8638	0.8673	
1.6536	0.9680	24.9508	286.8479	0.8673	
1.6413	1.0254	24.9508	286.4344	0.8673	
1.6392	1.0275	24.9754	286.7048	0.8673	
1.6351	1.0530	24.9754	285.6542	0.8673	
1.6331	1.0551	25.0081	286.0842	0.8578	
1.6331	1.0572	24.9754	285.9409	0.8673	
1.6209	1.1146	24.9508	285.2717	0.8673	
1.6229	1.1167	25.0245	285.2398	0.8673	
1.6147	1.1634	25.0000	285.1282	0.8673	
1.6147	1.1656	24.9754	285.0804	0.8673	
1.5969	1.2165	24.9754	284.9953	0.8578	
1.5792	1.2718	24.9918	284.8570	0.8673	
1.5655	1.3249	24.9754	284.5485	0.8673	

**TABLE 4 - STATIC PRESSURE WINDWARD** (continued, X63.9900)

TEST 47	RUN 118	POINTS 79	PoNOM 25.0000	X(cm) 63.9900	Pref 14.6944
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5513	1.3780	24.9754	284.4900	0.8673	
1.5492	1.3801	25.0245	284.5379	0.8673	
1.5308	1.4311	25.0000	284.2345	0.8673	
1.5369	1.4332	24.9754	284.2824	0.8673	
1.5109	1.4842	25.0081	283.9416	0.8673	
1.4919	1.5351	24.9754	283.8457	0.8673	
1.4673	1.5925	24.9754	283.4513	0.8673	
1.4632	1.5946	25.0245	283.5153	0.8673	
1.4673	1.5967	25.0245	283.6752	0.8388	
1.4406	1.6541	25.0245	283.3073	0.8673	
1.4386	1.6562	24.9754	283.3074	0.8673	
1.4141	1.7072	25.0245	282.9713	0.8673	
1.4141	1.7093	24.9754	283.2274	0.8673	
1.4141	1.7114	24.9754	282.9713	0.8958	
1.3895	1.7645	25.0081	283.0460	0.8673	
1.3649	1.8198	24.9754	283.0674	0.8673	
1.3649	1.8219	25.0000	283.0033	0.8958	
1.3486	1.8665	25.0245	282.7151	0.8673	
1.3513	1.8686	25.0081	282.6724	0.8768	
1.3363	1.9153	25.0000	282.5870	0.8673	
1.3363	1.9175	24.9754	282.5870	0.8673	
1.3158	1.9578	24.9754	282.3628	0.8673	
1.3199	1.9599	25.0000	282.3948	0.8530	
1.3158	1.9918	25.0245	282.1063	0.8673	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 155	POINTS 82	PoNOM 25.0000	X(cm) 53.8300	Pref 14.7750
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.1088	0.0116	24.2782	298.5715	0.6822	
1.1088	0.0137	24.2782	298.7273	0.7011	
1.0926	0.0180	24.4338	297.9639	0.6822	
1.0926	0.0201	24.6058	297.8547	0.6822	
1.2708	0.0456	24.9008	297.7612	0.7106	
1.5461	0.0477	25.0974	297.6052	0.7106	
1.4327	0.0499	24.9991	297.6675	0.7106	
2.0266	0.0732	25.1957	297.4700	0.7295	
2.5179	0.1030	25.2940	296.6371	0.7390	
2.4936	0.1051	25.2940	296.6371	0.7248	
2.8256	0.1284	25.3432	296.0117	0.7390	
2.7284	0.1306	25.3432	296.1994	0.7106	
2.9957	0.1539	25.3186	295.3699	0.7390	
3.0200	0.1561	25.3432	295.3856	0.7390	
3.2467	0.1922	25.3186	295.0722	0.7248	
3.3115	0.1943	25.3432	294.7587	0.7390	
3.4734	0.2368	25.3432	294.4607	0.7248	
3.6192	0.2389	25.3678	293.9428	0.7106	
3.7488	0.2771	25.3432	293.8485	0.7106	
3.8460	0.2792	25.3678	293.8014	0.7248	
4.0835	0.3196	25.3596	293.4714	0.7295	
4.3103	0.3600	25.3432	293.0103	0.7295	
4.6396	0.4194	25.3432	292.7323	0.7248	
4.6882	0.4216	25.3432	292.4648	0.7106	
4.9797	0.4725	25.3678	292.2915	0.7248	
4.9959	0.4747	25.3432	292.2443	0.7390	
5.2713	0.5256	25.2940	292.0237	0.7106	
5.3280	0.5278	25.3186	291.9292	0.7390	
5.6438	0.5830	25.2940	291.5508	0.7390	
5.6681	0.5851	25.3186	291.5508	0.7248	
5.9839	0.6446	25.3432	291.3300	0.7390	
6.0325	0.6467	25.3186	291.1565	0.7248	
6.3888	0.7019	25.3432	290.9197	0.7106	
6.3969	0.7040	25.3186	290.8408	0.7390	
6.7397	0.7635	25.3104	290.4459	0.7295	
7.0853	0.8230	25.2940	290.1298	0.7248	
7.0691	0.8251	25.2940	290.1614	0.7390	
7.4254	0.8761	25.2940	289.7819	0.7106	
7.4416	0.8782	25.2940	289.6870	0.7390	
7.4416	0.8825	25.2940	289.5287	0.7390	
7.7655	0.9334	25.2940	289.3705	0.7106	
7.7331	0.9356	25.2940	289.5604	0.7106	
7.7655	0.9377	25.2940	289.4655	0.7106	
8.0570	0.9929	25.3432	289.2122	0.7390	
8.0732	0.9950	25.3432	289.0221	0.7390	
8.0894	0.9972	25.3432	289.1488	0.7390	
8.2676	1.0290	25.2940	288.7686	0.7390	
8.2757	1.0311	25.2940	288.7686	0.7248	
8.3000	1.0354	25.2940	288.3565	0.7106	
8.3108	1.0375	25.2940	288.2084	0.7201	
8.3324	1.0396	25.2940	288.1978	0.7106	
8.3162	1.0418	25.2940	288.1978	0.7390	
8.3324	1.0460	25.2940	288.0709	0.7390	
8.3405	1.0481	25.2940	288.0710	0.7248	
8.3972	1.0588	25.2448	287.8170	0.7106	



**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X53.8300)

<b>TEST</b> 47	<b>RUN</b> 155	<b>POINTS</b> 82	<b>PoNOM</b> 25.0000	<b>X(cm)</b> 53.8300	<b>Prof</b> 14.7750
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
8.3972	1.0609		25.2203	287.6583	0.7390
8.5753	1.1055		25.2940	287.5312	0.7390
8.5915	1.1097		25.2940	287.4518	0.7248
8.8345	1.1905		25.3186	287.3565	0.7390
8.8183	1.1926		25.2940	287.4041	0.7390
8.9316	1.2712		25.3432	287.0228	0.7106
8.9316	1.2733		25.3432	286.9910	0.7106
8.9316	1.2754		25.3432	286.9274	0.7390
8.9478	1.3519		25.2940	286.7367	0.7390
8.9640	1.3540		25.2448	286.8320	0.7106
8.9640	1.3561		25.2940	286.7048	0.7390
8.9802	1.4283		25.2940	286.6094	0.7106
8.9802	1.4305		25.3432	286.6730	0.7390
8.9640	1.4326		25.2940	286.6094	0.7106
8.9802	1.5091		25.3268	286.3972	0.7295
8.9802	1.5855		25.3186	286.1002	0.7248
8.9802	1.5876		25.3432	286.0365	0.7390
8.9802	1.6535		25.2448	286.0046	0.7106
8.9478	1.6556		25.2448	285.8772	0.7106
8.9802	1.6577		25.2448	285.9091	0.7390
8.9640	1.7215		25.2940	285.8772	0.7106
8.9478	1.7236		25.2448	285.8135	0.7106
8.9640	1.7257		25.2448	285.7817	0.7106
8.9640	1.7831		25.2940	285.4630	0.7390
8.9640	1.7852		25.2940	285.5108	0.7106
8.9802	1.8404		25.2940	285.2717	0.7390
8.9559	1.8425		25.2940	285.2558	0.7248

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 154	POINTS 79	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7539
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.1129	0.0074	25.7231	296.1837	0.7300	
1.1048	0.0095	25.7231	295.1349	0.7157	
1.1211	0.0116	25.6739	294.9468	0.7157	
1.0967	0.0244	25.5755	293.6600	0.7014	
1.2840	0.0329	25.5263	292.4962	0.7157	
1.2514	0.0350	25.4771	292.6221	0.7157	
1.2840	0.0371	25.4771	292.3388	0.7157	
1.5608	0.0435	25.4771	291.6454	0.7157	
1.6423	0.0456	25.4771	291.3931	0.6872	
1.9110	0.0541	25.4771	290.8408	0.7157	
2.2449	0.0753	25.4279	290.3195	0.7157	
2.3100	0.0796	25.4771	290.1614	0.7157	
2.5543	0.1008	25.4279	289.5287	0.6872	
2.6032	0.1030	25.4279	289.4655	0.7157	
2.7986	0.1221	25.4279	289.0854	0.6872	
2.8312	0.1242	25.4279	288.8320	0.7157	
2.8475	0.1263	25.4771	288.6101	0.7157	
3.0347	0.1497	25.4525	288.4040	0.7157	
3.1895	0.1688	25.4033	288.0709	0.7300	
3.3767	0.1985	25.4525	287.4201	0.7014	
3.5315	0.2198	25.3787	287.3088	0.6872	
3.5152	0.2219	25.4279	287.3724	0.7157	
3.6944	0.2431	25.4279	286.8320	0.7157	
3.6618	0.2453	25.4279	286.8956	0.7157	
3.8409	0.2686	25.4115	286.4291	0.7157	
4.0364	0.3047	25.3787	286.3548	0.6872	
4.0527	0.3069	25.3787	286.2912	0.7157	
4.2644	0.3408	25.4279	285.9091	0.7157	
4.2644	0.3430	25.3787	285.7817	0.6872	
4.4598	0.3791	25.3787	285.4311	0.7157	
4.4924	0.3812	25.3787	285.2079	0.6872	
4.6878	0.4173	25.3787	285.0485	0.7157	
4.7204	0.4194	25.3787	284.8251	0.6872	
4.9321	0.4534	25.3295	284.3782	0.6872	
4.9240	0.4555	25.3787	284.4420	0.7157	
5.1439	0.4938	25.3295	284.3622	0.7300	
5.3800	0.5299	25.3787	284.2504	0.7157	
5.6650	0.5766	25.3787	283.9149	0.7014	
5.9419	0.6276	25.3787	283.5473	0.6872	
5.9419	0.6297	25.3787	283.6752	0.7157	
6.2676	0.6743	25.3787	283.0994	0.7157	
6.2513	0.6764	25.3787	283.1314	0.6872	
6.2513	0.6786	25.3295	283.2593	0.7157	
6.5445	0.7295	25.3295	283.0834	0.7157	
6.8648	0.7826	25.3623	282.7258	0.7157	
7.1797	0.8336	25.3787	282.4268	0.7157	
7.1878	0.8357	25.3787	282.4109	0.7014	
7.4891	0.8910	25.3787	282.1544	0.7157	
7.4891	0.8952	25.3295	282.2666	0.7157	
7.8719	0.9526	25.3541	282.0102	0.7157	
7.8637	0.9547	25.3295	282.1384	0.6872	
8.2220	1.0205	25.3459	281.9032	0.6967	
8.5070	1.0800	25.3541	281.3846	0.7014	
8.5151	1.0821	25.3295	281.4327	0.7157	
8.5857	1.1034	25.3787	281.3257	0.7062	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X55.1000)

TEST 47	RUN 154	POINTS 79	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7539
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
8.6047	1.1076	25.3295	281.1437	0.6872	
8.5966	1.1097	25.3295	281.2079	0.6872	
8.5966	1.1119	25.3295	281.2401	0.7157	
8.6237	1.1140	25.3131	281.0046	0.6967	
8.8083	1.1756	25.3787	280.9832	0.7157	
8.8001	1.1777	25.3541	281.0153	0.6872	
8.9223	1.2542	25.3787	280.7904	0.6872	
8.9223	1.2563	25.3295	280.7261	0.7157	
8.9223	1.2627	25.3787	280.7904	0.7443	
8.9712	1.3370	25.3295	280.6618	0.7157	
8.9712	1.3391	25.3295	280.6297	0.7157	
8.9712	1.3434	25.2804	280.6297	0.6872	
9.0037	1.4177	25.3541	280.4529	0.6872	
9.0037	1.4198	25.3295	280.5333	0.7157	
9.0037	1.4942	25.2804	280.2117	0.6872	
9.0037	1.4963	25.3050	280.3082	0.7014	
9.0200	1.5685	25.3295	280.2439	0.7157	
9.0200	1.6407	25.3295	279.8900	0.7157	
9.0200	1.6429	25.3295	279.8578	0.7157	
9.0200	1.7087	25.3295	279.9221	0.7157	
9.0200	1.7108	25.3295	279.8900	0.6872	
9.0091	1.7703	25.3295	279.7719	0.7062	
9.0091	1.8319	25.3131	279.7934	0.6967	
9.0037	1.8786	25.3050	279.4393	0.7014	

TABLE 5 - TOTAL PRESSURE LEEWARD.

TEST 47	RUN 153	POINTS 75	PoNOM 25.0000	X(cm) 56.3700	Pref 14.7539
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5414	0.0031	25.3223	295.5575	0.7678	
1.5414	0.0052	25.2977	294.6328	0.7536	
1.5495	0.0074	25.1258	293.1099	0.7536	
1.5495	0.0095	25.1749	293.7543	0.7536	
1.5333	0.0180	25.0767	291.9607	0.7536	
1.5333	0.0201	25.0767	291.8976	0.7536	
1.5495	0.0286	25.0521	291.0460	0.7678	
1.5333	0.0307	25.0767	291.2354	0.7820	
1.5738	0.0392	25.0521	290.2721	0.7678	
1.5819	0.0414	25.0767	290.2879	0.7536	
1.6628	0.0626	25.0767	289.1805	0.7536	
1.6385	0.0647	25.0767	289.3389	0.7678	
1.7599	0.0860	25.0767	288.5467	0.7536	
1.7437	0.0881	25.0521	288.7845	0.7536	
1.8732	0.1093	25.0767	288.1027	0.7536	
1.9056	0.1114	25.0767	287.9757	0.7536	
2.1268	0.1454	25.0603	287.4571	0.7536	
2.5153	0.1815	25.0767	287.0228	0.7536	
3.0062	0.2198	25.0767	286.4503	0.7536	
2.9900	0.2219	25.0767	286.4503	0.7536	
2.9577	0.2240	25.0275	286.4821	0.7820	
3.3867	0.2601	25.0767	285.9728	0.7536	
3.4271	0.2623	25.0767	285.9728	0.7536	
3.8479	0.2984	25.0767	285.6382	0.7678	
3.8479	0.3005	25.0767	285.5905	0.7536	
4.2364	0.3302	25.0767	284.9527	0.7536	
4.2121	0.3323	25.0767	285.1123	0.7536	
4.6734	0.3791	25.0767	285.0485	0.7536	
4.7058	0.3812	25.0767	284.8889	0.7536	
4.7058	0.3833	25.0767	285.0485	0.7536	
5.2129	0.4279	25.0931	284.4740	0.7536	
5.6445	0.4747	25.1258	283.8990	0.7536	
5.6553	0.4768	25.0603	283.9629	0.7631	
6.0492	0.5193	25.0767	283.8031	0.7536	
6.0654	0.5214	25.1012	283.7072	0.7536	
6.3891	0.5724	25.0275	283.2593	0.7536	
6.3891	0.5745	25.0275	283.4513	0.7536	
6.7290	0.6361	25.0767	283.0034	0.7536	
6.7506	0.6382	25.0603	283.0034	0.7536	
6.9988	0.6956	25.1094	282.6938	0.7631	
7.1781	0.7614	25.1012	282.4429	0.7536	
7.3603	0.8251	25.1012	282.4268	0.7536	
7.3764	0.8272	25.1258	282.4268	0.7536	
7.6192	0.8910	25.0767	282.0583	0.7536	
7.6354	0.8931	25.0767	282.0102	0.7536	
7.8836	0.9419	25.0767	281.7749	0.7536	
7.8782	0.9441	25.0767	281.6573	0.7536	
8.1857	1.0078	25.0767	281.5290	0.7394	
8.1696	1.0099	25.0767	281.5932	0.7252	
8.6551	1.1204	25.0767	281.2079	0.7536	
8.6390	1.1225	25.0767	281.2240	0.7536	
8.6551	1.1267	25.0767	281.2401	0.7536	
8.7199	1.1437	25.1258	281.2401	0.7536	
8.7199	1.1458	25.0767	281.0474	0.7394	
8.7361	1.1522	25.0767	280.9189	0.7536	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X56.3700)

<b>TEST</b> 47	<b>RUN</b> 153	<b>POINTS</b> 75	<b>PoNOM</b> 25.0000	<b>X(cm)</b> 56.3700	<b>Prof</b> 14.7539
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
8.7307	1.1543		25.0439	280.8333	0.7536
8.8332	1.2011		25.0767	280.4368	0.7536
8.8278	1.2032		25.0767	280.4904	0.7631
8.9141	1.2775		25.0767	280.3404	0.7820
8.9249	1.2797		25.0767	280.3403	0.7536
8.9627	1.4305		25.0275	279.9865	0.7536
8.9789	1.4326		25.0275	279.9543	0.7536
9.0166	1.5048		25.0931	279.9758	0.7536
9.0112	1.5112		25.0767	279.8900	0.7536
9.0193	1.5791		25.0521	279.6164	0.7678
9.0112	1.5813		25.0767	279.6647	0.7536
9.0112	1.5855		25.0767	279.6647	0.7820
9.0436	1.6450		25.0890	279.7050	0.7536
9.0436	1.7087		25.0767	279.4393	0.7536
9.0436	1.7108		25.0767	279.3749	0.7441
9.0436	1.7682		25.0767	279.5037	0.7536
9.0598	1.7703		25.0767	279.4232	0.7394
9.0598	1.8234		25.1258	279.4232	0.7678
9.0598	1.8255		25.1012	279.4392	0.7536
9.0517	1.8723		25.0767	279.1333	0.7394

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 156	POINTS 83	PoNOM 25.0000	X(cm) 57.0050	Pref 14.7750
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5414	0.0180	24.6550	294.6019	0.6696	
1.5360	0.0201	24.5567	294.7587	0.6696	
1.5630	0.0307	25.1465	294.2253	0.6886	
1.5847	0.0329	25.2940	293.7543	0.6981	
1.6334	0.0520	25.4906	293.4715	0.6696	
1.6172	0.0541	25.5152	293.5500	0.6838	
1.6822	0.0732	25.5889	293.0102	0.6981	
1.7308	0.0987	25.6135	292.2916	0.6981	
1.7471	0.1008	25.5889	291.8976	0.6696	
1.7959	0.1178	25.5889	291.6139	0.6981	
1.7959	0.1199	25.5889	291.5824	0.6981	
1.8121	0.1221	25.5889	291.6454	0.6696	
1.9583	0.1645	25.5889	290.9828	0.6981	
2.0070	0.1667	25.5889	290.6355	0.6981	
1.9908	0.1688	25.5889	290.8881	0.6981	
2.1938	0.2155	25.5398	290.4459	0.6838	
2.2832	0.2176	25.5398	290.1614	0.6981	
2.4618	0.2623	25.5889	289.9717	0.6981	
2.6081	0.2644	25.5398	289.7661	0.6981	
3.0033	0.3111	25.5398	289.4444	0.6981	
3.4636	0.3600	25.5234	289.2544	0.7076	
4.0104	0.4046	25.5398	288.7686	0.6886	
4.4598	0.4492	25.5398	288.4199	0.6981	
4.5654	0.4513	25.5398	288.3881	0.6981	
5.1095	0.4959	25.5398	288.1027	0.6981	
4.9634	0.4980	25.4906	288.2296	0.6696	
5.6077	0.5426	25.5234	287.7853	0.6981	
6.1816	0.5872	25.4906	287.5630	0.6981	
6.2060	0.5894	25.5152	287.3089	0.6838	
6.7556	0.6361	25.5398	286.9910	0.6981	
7.3079	0.6807	25.4906	286.5882	0.6886	
7.8791	0.7317	25.4906	286.2594	0.6838	
7.9035	0.7338	25.4906	286.2912	0.6981	
8.3745	0.7784	25.5398	286.0683	0.6981	
8.4070	0.7805	25.5398	285.9091	0.7267	
8.4070	0.7826	25.5398	285.8454	0.6981	
8.8294	0.8251	25.4906	285.8135	0.6981	
8.8456	0.8294	25.4906	285.8454	0.6981	
8.8456	0.8315	25.4906	285.7498	0.7267	
9.1055	0.8740	25.4906	285.4630	0.6981	
9.1055	0.8761	25.4415	285.3514	0.6981	
9.1705	0.9228	25.5398	285.1122	0.6981	
9.1380	0.9249	25.4906	285.2238	0.6838	
9.1109	0.9674	25.5234	285.0378	0.6981	
9.0974	1.0142	25.4906	284.8092	0.6981	
8.9593	1.0163	25.4906	284.6336	0.6696	
8.9106	1.0460	25.4906	284.5059	0.6981	
8.9918	1.0481	25.4906	284.3462	0.6696	
8.9593	1.0503	25.4906	284.3462	0.6696	
8.8943	1.0588	25.4415	284.2504	0.7267	
8.9187	1.0630	25.4906	284.3143	0.6838	
8.9025	1.0694	25.4415	284.2504	0.6838	
8.8781	1.0715	25.4415	284.2504	0.6981	
8.8943	1.0736	25.4415	283.9948	0.6696	
8.8619	1.0758	25.4661	283.9629	0.6838	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X57.0050)

TEST 47	RUN 156	POINTS 83	PoNOM 25.0000	X(cm) 57.0050	Prof 14.7750
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
8.9106	1.0906	25.4415	283.7391	0.6696	
8.8943	1.0927	25.4906	283.7072	0.6838	
8.9160	1.1310	25.4742	283.5793	0.6886	
8.9268	1.2011	25.4906	283.3553	0.6696	
8.9512	1.2032	25.4661	283.4673	0.6982	
8.9918	1.2733	25.4906	283.2274	0.6696	
8.9918	1.2754	25.4661	283.1634	0.6981	
9.0243	1.3434	25.4906	282.9713	0.6981	
9.0080	1.3455	25.4415	283.0353	0.6981	
9.0080	1.3476	25.4415	283.0034	0.6981	
9.0405	1.4135	25.4415	282.8432	0.6981	
9.0243	1.4156	25.4415	282.9073	0.6981	
9.0243	1.4177	25.3923	282.8112	0.6696	
9.0243	1.4857	25.4415	282.5336	0.6886	
9.0080	1.5494	25.3923	282.6190	0.6696	
9.0080	1.5515	25.4415	282.7151	0.6696	
9.0080	1.5537	25.4415	282.6190	0.6696	
9.0243	1.6174	25.4415	282.7472	0.6981	
9.0243	1.6195	25.4415	282.6671	0.6838	
9.0405	1.6790	25.4415	282.4589	0.6696	
9.0243	1.6811	25.4415	282.5550	0.6838	
9.0243	1.7384	25.4415	282.2346	0.6696	
9.0243	1.7406	25.4415	282.1384	0.6838	
9.0405	1.7937	25.4415	282.1704	0.6696	
9.0324	1.7979	25.4415	282.2666	0.6981	
9.0351	1.8468	25.3923	281.9674	0.6696	
9.0405	1.8850	25.3923	281.7856	0.6981	
9.0405	1.8871	25.4415	281.9139	0.6981	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 152	POINTS 92	PoNOM 25.0000	X(cm) 57.6400	Pref 14.7540
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5447	0.0052	25.5352	296.7152	0.6561	
1.5325	0.0074	25.5724	297.6664	0.6417	
1.5529	0.0095	25.3617	295.1505	0.6417	
1.5366	0.0201	25.3122	294.1939	0.6561	
1.5366	0.0222	25.3122	293.9742	0.6561	
1.5447	0.0307	25.2626	293.1728	0.6273	
1.5529	0.0329	25.2626	292.7795	0.6273	
1.5611	0.0414	25.2626	292.4648	0.6273	
1.5529	0.0435	25.3122	292.3073	0.6273	
1.5857	0.0626	25.2626	291.7400	0.6561	
1.5775	0.0647	25.2626	291.5823	0.6561	
1.6021	0.0881	25.2626	291.2512	0.6273	
1.6348	0.1136	25.2626	290.4775	0.6273	
1.6348	0.1157	25.2626	290.4775	0.6273	
1.6676	0.1369	25.2626	289.9084	0.6273	
1.6676	0.1391	25.2626	289.9401	0.6417	
1.7167	0.1582	25.3122	289.7819	0.6273	
1.7167	0.1603	25.2626	289.4655	0.6561	
1.7741	0.1815	25.3122	289.0854	0.6273	
1.7823	0.1837	25.2626	289.1171	0.6273	
1.8314	0.2049	25.2626	288.5784	0.6561	
1.8232	0.2070	25.2626	288.5626	0.6417	
1.8806	0.2304	25.2626	288.1027	0.6417	
1.8969	0.2346	25.2626	288.0392	0.6273	
1.9706	0.2516	25.2874	287.6742	0.6417	
1.9624	0.2538	25.3122	287.8170	0.6273	
2.1016	0.2920	25.2874	287.2294	0.6273	
2.0935	0.2941	25.3122	287.2771	0.6561	
2.2819	0.3281	25.2626	287.0546	0.6417	
2.3064	0.3302	25.2626	286.7367	0.6561	
2.5357	0.3642	25.2626	286.3548	0.6273	
2.4866	0.3663	25.2874	286.4980	0.6273	
2.7650	0.3982	25.2626	286.0205	0.6561	
2.7486	0.4003	25.2626	286.1002	0.6273	
3.0353	0.4364	25.2626	285.8613	0.6273	
3.0435	0.4407	25.2626	285.8772	0.6561	
3.3874	0.4704	25.2626	285.4949	0.6561	
3.3219	0.4725	25.2626	285.5267	0.6561	
3.4038	0.4768	25.2626	285.4311	0.6561	
3.7805	0.5214	25.3122	285.1442	0.6273	
3.9116	0.5278	25.3122	285.1442	0.6273	
4.4466	0.5745	25.2791	284.9846	0.6465	
5.0745	0.6233	25.3122	284.6017	0.6273	
4.9763	0.6276	25.2626	284.5858	0.6561	
5.7788	0.6743	25.3122	284.3782	0.6273	
5.7051	0.6764	25.2874	284.5059	0.6417	
6.3630	0.7253	25.2791	284.1226	0.6273	
7.0073	0.7741	25.3122	283.7072	0.6273	
6.9827	0.7763	25.2626	283.9469	0.6273	
7.6461	0.8251	25.2626	283.5259	0.6465	
8.3504	0.8718	25.3122	283.3553	0.6273	
8.3586	0.8740	25.2874	283.3074	0.6417	
9.0710	0.9207	25.2626	283.0674	0.6273	
9.0382	0.9228	25.2874	283.0514	0.6417	
9.6689	0.9674	25.2626	282.8752	0.6417	



**TABLE 3 - TOTAL PRESSURE LEEWARD** (continued, X57.6400)

TEST 47	RUN 152	POINTS 92	PoNOM 25.0000	X(cm) 57.6400	Pref 14.7540
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
9.7426	0.9717	25.2626	282.9073	0.6273	
10.4305	1.0163	25.2626	282.6831	0.6273	
10.3568	1.0184	25.2378	282.7632	0.6417	
10.9874	1.0566	25.2626	282.6511	0.6273	
10.9547	1.0588	25.2874	282.5870	0.6417	
11.2331	1.0779	25.2626	282.6190	0.6273	
11.3150	1.0821	25.2626	282.3948	0.6273	
11.2372	1.0842	25.2750	282.4829	0.6273	
11.3314	1.0864	25.2626	281.7536	0.6273	
11.3150	1.0885	25.2626	281.8605	0.6369	
11.3641	1.0927	25.2130	281.6573	0.6273	
11.3642	1.0949	25.2378	281.6092	0.6273	
11.4460	1.1034	25.2130	281.5932	0.6273	
11.4215	1.1055	25.2626	281.5450	0.6561	
11.6590	1.1501	25.2461	281.4648	0.6273	
11.4351	1.2053	25.2791	281.4969	0.6561	
10.3868	1.2627	25.2626	281.1758	0.6369	
9.5460	1.3221	25.2626	281.0795	0.6417	
9.6443	1.3264	25.2626	281.0795	0.6273	
9.2949	1.3795	25.2626	280.7797	0.6273	
9.0874	1.4347	25.2626	280.5976	0.6273	
9.0710	1.4368	25.2874	280.6458	0.6273	
8.9892	1.4878	25.2626	280.4368	0.6273	
9.0055	1.4899	25.2626	280.5011	0.6561	
9.0219	1.4921	25.2626	280.5011	0.6273	
8.9783	1.5409	25.2791	280.4047	0.6369	
8.9673	1.5961	25.2295	280.3189	0.6465	
8.9728	1.6471	25.2461	280.0830	0.6369	
8.9810	1.6960	25.2626	280.2278	0.6273	
8.9728	1.6981	25.2130	280.2760	0.6273	
8.9837	1.7427	25.2295	280.2010	0.6369	
8.9892	1.7852	25.2626	279.8578	0.6273	
8.9973	1.7873	25.2626	279.8900	0.6417	
8.9892	1.8298	25.3122	279.7934	0.6273	
9.0055	1.8340	25.3122	279.7934	0.6417	
9.0055	1.8659	25.2461	279.7612	0.6369	
8.9892	1.8999	25.2626	279.5359	0.6273	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 157	POINTS 77	PoNOM 25.0000	X(cm) 58.2750	Pref 14.7750
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7275	0.0159	25.7364	295.1347	0.7526	
1.7438	0.0180	25.7364	295.0095	0.7384	
1.7194	0.0265	25.6872	293.7856	0.7526	
1.7275	0.0286	25.6872	293.7857	0.7384	
1.7275	0.0350	25.6381	292.0237	0.7384	
1.7194	0.0371	25.6135	292.3860	0.7242	
1.7681	0.0732	25.5644	290.6987	0.7526	
1.7438	0.0753	25.5889	291.0776	0.7384	
1.7924	0.1093	25.5889	290.1298	0.7099	
1.7843	0.1114	25.5398	290.1456	0.7242	
1.8086	0.1412	25.5889	289.9401	0.7384	
1.8329	0.1433	25.5644	289.6554	0.7526	
1.8572	0.1730	25.5398	289.0538	0.7668	
1.8572	0.1752	25.5644	289.0221	0.7526	
1.9058	0.2070	25.5398	288.6418	0.7384	
1.9220	0.2092	25.5398	288.3881	0.7384	
1.9220	0.2113	25.5398	288.3881	0.7384	
1.9868	0.2431	25.5398	288.3248	0.7242	
1.9544	0.2453	25.5398	288.3881	0.7384	
2.0678	0.2771	25.5889	288.0709	0.7384	
2.0678	0.2792	25.5644	287.9757	0.7242	
2.1704	0.3111	25.5070	287.4889	0.7384	
2.2676	0.3472	25.5234	287.2135	0.7194	
2.3864	0.3791	25.5070	286.8426	0.7479	
2.5539	0.4131	25.5398	286.4503	0.7384	
2.6025	0.4152	25.5398	286.2593	0.7384	
2.7159	0.4492	25.5398	285.9728	0.7384	
2.7888	0.4513	25.5398	285.9091	0.7242	
2.9913	0.4810	25.4906	285.7180	0.7099	
3.0075	0.4832	25.4906	285.6224	0.7384	
2.9427	0.4853	25.5398	285.7498	0.7099	
3.1858	0.5129	25.5152	285.4630	0.7384	
3.2019	0.5150	25.4906	285.2717	0.7384	
3.6880	0.5702	25.4906	285.1760	0.7384	
3.6556	0.5724	25.4906	285.1441	0.7242	
4.1255	0.6340	25.5398	284.9527	0.7384	
4.5629	0.6849	25.5398	284.9208	0.7384	
4.8222	0.6871	25.4906	284.8251	0.7384	
5.6971	0.7444	25.5152	284.4580	0.7384	
5.7295	0.7465	25.5398	284.4740	0.7384	
6.3398	0.7996	25.4742	284.1333	0.7384	
6.8555	0.8379	25.4906	283.9629	0.7384	
6.8960	0.8400	25.4906	283.9629	0.7384	
7.2471	0.8634	25.5070	283.7818	0.7289	
7.5522	0.8910	25.5152	283.6912	0.7384	
7.5927	0.8931	25.4906	283.7391	0.7384	
7.9573	0.9186	25.4661	283.4513	0.7384	
8.0140	0.9207	25.4906	283.3873	0.7384	
8.2084	0.9292	25.4906	283.1634	0.7384	
8.0950	0.9313	25.4415	283.3553	0.7384	
8.2084	0.9356	25.4906	283.1954	0.7384	
8.4677	0.9526	25.4661	283.1314	0.7242	
8.5001	0.9547	25.4906	283.0994	0.7384	
9.0995	1.0014	25.4906	283.0034	0.7384	
9.2454	1.0035	25.4661	282.8593	0.7384	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X58.2750)

TEST 47	RUN 157	POINTS 77	PoNOM 25.0000	X(cm) 58.2750	Pref 14.7750
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
10.0555	1.0566	25.4742	282.6404	0.7384	
10.9844	1.1204	25.5234	282.3734	0.7289	
12.1456	1.2096	25.4906	282.2346	0.7099	
12.1537	1.2117	25.4906	282.2986	0.7384	
12.8179	1.2988	25.4415	282.1384	0.7384	
12.8260	1.3009	25.4906	282.1384	0.7099	
12.6640	1.3944	25.4415	281.9032	0.7384	
11.2220	1.4772	25.4415	281.7375	0.7384	
11.3841	1.4793	25.4415	281.8177	0.7384	
9.7638	1.5600	25.4906	281.5610	0.7384	
9.8610	1.5622	25.4415	281.5932	0.7384	
9.8286	1.5643	25.4906	281.5932	0.7099	
9.2292	1.6365	25.4415	281.3685	0.7384	
9.2292	1.6386	25.4415	281.4969	0.7384	
9.2130	1.6429	25.4415	281.3043	0.7099	
9.1076	1.7087	25.4661	281.1919	0.7384	
9.0833	1.7108	25.4415	281.2079	0.7384	
9.0995	1.7724	25.4906	281.3043	0.7384	
9.0752	1.7746	25.4661	281.2561	0.7384	
9.0671	1.8340	25.4415	281.1758	0.7384	
9.0671	1.8362	25.4415	281.2401	0.7384	
9.0509	1.8850	25.4415	281.1758	0.7384	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 150	POINTS 97	PoNOM 25.0000	X(cm) 58.9100	Pref 14.7639
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.6991	0.0159	25.3751	291.0144	0.6882	
1.7045	0.0180	25.3751	291.2669	0.6882	
1.6964	0.0286	25.3997	289.9084	0.7165	
1.7004	0.0307	25.4243	290.2246	0.6882	
1.7112	0.0371	25.4734	289.3282	0.6882	
1.7246	0.0477	25.4898	288.7686	0.6976	
1.7448	0.0668	25.4734	288.2613	0.6882	
1.7407	0.0690	25.4979	288.2772	0.7024	
1.7568	0.0923	25.5061	287.6265	0.6976	
1.7730	0.1157	25.5225	286.6306	0.6976	
1.7904	0.1369	25.4898	286.0683	0.6976	
1.8112	0.1582	25.4857	285.2318	0.6953	
1.8384	0.1815	25.5102	284.7533	0.7094	
1.8616	0.2176	25.4734	284.3143	0.7165	
1.8757	0.2198	25.5225	284.0907	0.7024	
1.9180	0.2538	25.4734	283.8990	0.6882	
1.9301	0.2559	25.4979	283.6912	0.7024	
1.9744	0.2920	25.5225	283.5792	0.6882	
1.9946	0.2941	25.4734	283.4513	0.6882	
1.9825	0.2962	25.5225	283.5792	0.7165	
2.0510	0.3260	25.5225	283.1154	0.7165	
2.0348	0.3281	25.4734	283.3873	0.6882	
2.1336	0.3642	25.4734	282.8272	0.7024	
2.1396	0.3663	25.4734	282.7151	0.7024	
2.2282	0.4003	25.5061	282.4268	0.6976	
2.3169	0.4385	25.3997	282.1865	0.6882	
2.3290	0.4407	25.3751	282.3628	0.6882	
2.3330	0.4428	25.3260	282.1704	0.7165	
2.4539	0.4874	25.3588	281.7963	0.7071	
2.7037	0.5320	25.5552	281.5076	0.7071	
2.7319	0.5341	25.5716	281.4327	0.6882	
2.9495	0.5830	25.4898	281.1437	0.7071	
3.5377	0.6191	25.2769	275.2052	0.6882	
3.2503	0.6318	25.4734	280.8011	0.6976	
3.3040	0.6340	25.4734	280.6618	0.6882	
3.6492	0.6807	25.5061	280.4690	0.6882	
3.6868	0.6828	25.4734	280.4368	0.6882	
3.4531	0.6849	25.4734	280.6297	0.6882	
4.0534	0.7295	25.4734	280.3404	0.7165	
3.8681	0.7317	25.5225	280.3082	0.6882	
4.0937	0.7338	25.5225	280.3404	0.7165	
4.5007	0.7805	25.4079	280.0830	0.6882	
4.5208	0.7826	25.4243	280.0830	0.7165	
5.2017	0.8442	25.3751	279.8900	0.6882	
4.9036	0.8464	25.3751	279.7934	0.6882	
5.2460	0.8506	25.3751	279.9221	0.7165	
5.8706	0.9037	25.3997	279.6486	0.7024	
5.9108	0.9058	25.4243	279.7291	0.7165	
6.5314	0.9377	25.4734	279.3748	0.6882	
6.5233	0.9398	25.4734	279.3748	0.7024	
6.6159	0.9419	25.3260	279.0527	0.7165	
6.5757	0.9441	25.3751	279.0527	0.7024	
6.6871	0.9483	25.5061	278.8915	0.6882	
7.4110	1.0014	25.5552	278.6981	0.7071	
7.3291	1.0035	25.4734	278.7625	0.7165	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X58.9100)

TEST 47	RUN 150	POINTS 97	PoNOM 25.0000	X(cm) 58.9100	Prof 14.7639
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
7.8126	1.0566	25.4979	278.5045	0.7024	
7.8126	1.0609	25.5225	278.5691	0.7165	
7.8126	1.0651	25.5225	278.4723	0.7165	
7.8126	1.1076	25.4734	275.4647	0.7165	
7.8126	1.1119	25.4243	275.4971	0.6882	
7.8126	1.1182	25.5225	278.5691	0.7165	
7.8126	1.1204	25.5225	278.4508	0.7071	
7.8126	1.1777	25.4734	278.2142	0.7165	
7.8126	1.1798	25.4734	278.3271	0.7024	
7.8126	1.2351	25.4979	278.0205	0.7024	
7.8126	1.2372	25.4734	277.8914	0.6882	
7.8126	1.2414	25.4734	278.0205	0.7165	
7.8126	1.2945	25.4734	277.9236	0.6882	
7.8126	1.2967	25.4734	277.8591	0.7165	
7.8126	1.2988	25.4734	277.8591	0.7165	
7.8126	1.3051	26.3577	278.0528	0.7165	
7.8126	1.3561	27.9952	278.8163	0.7730	
7.8126	1.3604	28.4701	279.0849	0.7730	
7.8126	1.4241	26.5050	277.8591	0.7447	
7.8126	1.4262	25.7354	276.5011	0.7071	
7.8126	1.4283	25.8664	275.8212	0.7165	
7.8126	1.4305	26.0629	277.2452	0.7165	
7.8126	1.4942	24.7856	276.8572	0.6882	
7.8126	1.4963	24.7856	276.9219	0.6882	
7.8126	1.5006	24.7856	276.8895	0.6882	
7.8126	1.5622	25.1295	276.9003	0.6882	
7.8126	1.6216	25.5389	276.8572	0.7071	
7.8126	1.6238	25.5225	276.8248	0.6882	
7.8126	1.6577	25.2278	275.4971	0.6882	
7.8126	1.6599	25.2278	275.5781	0.6882	
7.8126	1.6790	25.6699	276.7278	0.6882	
7.8126	1.6811	25.5962	276.6955	0.7024	
7.8126	1.6875	25.5716	276.6631	0.7165	
7.8126	1.7342	25.6699	276.8087	0.7165	
7.8126	1.7363	25.6699	276.8087	0.7024	
7.8126	1.7852	25.6535	276.4258	0.7165	
7.8126	1.7873	25.6699	276.4689	0.7165	
7.8126	1.7915	25.6699	276.4041	0.7165	
7.8126	1.8340	25.4079	276.2207	0.7165	
7.8126	1.8383	25.5225	276.3070	0.7165	
7.8126	1.8425	25.4734	276.2746	0.7165	
7.8126	1.8744	24.9985	275.8644	0.6882	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 151	POINTS 96	PoNOM 25.0000	X(cm) 58.9100	Pref 14.7682
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7808	0.0074	25.1833	290.5407	0.7797	
1.7808	0.0095	25.1833	290.5560	0.7655	
1.7808	0.0116	25.1834	290.4297	0.7655	
1.7646	0.0137	25.1343	289.3388	0.7512	
1.7700	0.0222	25.1016	288.3459	0.7702	
1.7646	0.0307	25.0852	287.4995	0.7797	
1.7646	0.0329	25.1098	287.2771	0.7655	
1.7808	0.0392	25.0852	286.1957	0.7797	
1.7808	0.0414	25.1343	286.3867	0.7512	
1.7970	0.0435	25.1343	286.1002	0.7797	
1.7970	0.0477	25.1343	285.7180	0.7512	
1.8051	0.0499	25.1343	285.6701	0.7797	
1.7970	0.0541	25.1343	285.2079	0.7512	
1.8131	0.0690	25.1588	284.6656	0.7512	
1.8131	0.0711	25.1343	284.5379	0.7512	
1.8293	0.0923	25.1220	283.8989	0.7726	
1.8400	0.1136	25.1343	283.2381	0.7702	
1.8616	0.1327	25.1343	282.4589	0.7797	
1.8535	0.1348	25.1343	282.6350	0.7655	
1.8859	0.1518	25.1343	282.2666	0.7655	
1.8778	0.1539	25.1343	282.2986	0.7797	
1.8778	0.1561	25.1833	282.0102	0.7797	
1.9020	0.1879	25.1588	281.8017	0.7797	
1.9424	0.2176	25.1343	281.1758	0.7797	
1.9586	0.2198	25.0852	281.2401	0.7797	
1.9424	0.2240	25.1343	281.4648	0.7512	
1.9909	0.2516	25.1833	280.9189	0.7512	
2.0071	0.2538	25.1833	280.8225	0.7797	
2.0717	0.2856	25.1343	280.5654	0.7512	
2.0637	0.2877	25.1343	280.6136	0.7512	
2.1148	0.3196	25.1343	280.2868	0.7702	
2.1202	0.3217	25.1343	280.3404	0.7797	
2.2172	0.3642	25.1343	279.7613	0.7655	
2.2172	0.3663	25.0852	279.7612	0.7797	
2.3465	0.4046	25.1343	279.4071	0.7512	
2.3142	0.4067	25.1343	279.5037	0.7797	
2.3304	0.4088	25.1343	279.4071	0.7797	
2.4597	0.4555	25.1343	279.1171	0.7512	
2.4920	0.4577	25.1343	279.0527	0.7512	
2.6456	0.5001	25.1343	278.8432	0.7512	
2.6860	0.5023	25.1833	278.7948	0.7512	
2.8315	0.5426	25.1343	278.6658	0.7512	
2.8800	0.5447	25.1343	278.6336	0.7512	
3.1224	0.5936	25.1833	278.5691	0.7512	
3.1547	0.5957	25.1343	278.5045	0.7512	
3.4295	0.6425	25.1833	278.1173	0.7512	
3.4780	0.6446	25.1833	278.2142	0.7797	
3.7529	0.6892	25.1343	277.9721	0.7797	
3.8013	0.6934	25.0852	277.9236	0.7512	
4.2863	0.7487	25.1098	277.7784	0.7797	
4.9894	0.8124	25.1098	277.4553	0.7655	
5.7006	0.8655	25.1343	277.4391	0.7655	
5.5632	0.8676	25.0852	277.5038	0.7512	
6.3876	0.9249	25.1833	277.3098	0.7512	
6.4927	0.9271	25.1588	277.2290	0.7512	

**TABLE 3 - TOTAL PRESSURE LEEWARD** (continued, X58.9100)

TEST 47	RUN 151	POINTS 96	PoNOM 25.0000	X(cm) 58.9100	Pref 14.7682
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
7.0988	0.9823	25.1833	277.1159	0.7512	
7.2362	0.9844	25.1588	277.1482	0.7512	
7.5837	1.0014	25.1343	276.9219	0.7512	
7.5837	1.0057	25.1343	277.0189	0.7655	
7.6645	1.0099	25.1343	276.6469	0.7655	
7.6807	1.0142	25.1343	276.5983	0.7797	
7.9232	1.0227	25.0852	276.4689	0.7797	
7.8828	1.0248	25.1343	276.3880	0.7655	
8.5697	1.0694	25.1343	276.2746	0.7797	
8.5536	1.0736	25.0852	276.1775	0.7512	
8.5859	1.0758	25.0852	276.1775	0.7512	
9.5288	1.1352	25.1506	276.2423	0.7702	
10.3801	1.1905	25.1343	275.9832	0.7512	
10.4448	1.1926	25.1343	275.8536	0.7797	
10.4610	1.1968	25.1343	275.8212	0.7797	
11.2530	1.2499	25.1343	275.7564	0.7797	
11.2853	1.2520	25.1343	275.8212	0.7797	
11.3338	1.2563	25.1343	275.8536	0.7797	
11.9804	1.3136	25.1588	275.8536	0.7797	
12.5947	1.3689	25.1343	275.6591	0.7655	
12.5946	1.3710	25.0852	275.5619	0.7512	
12.9664	1.4220	25.1343	275.4647	0.7797	
12.9503	1.4241	25.0852	275.4160	0.7655	
13.1200	1.4836	25.1098	275.3674	0.7797	
13.1280	1.4857	25.1343	275.3674	0.7512	
13.1927	1.5345	25.1343	275.1403	0.7512	
13.1927	1.5367	25.1343	275.1404	0.7797	
13.1604	1.5855	25.1343	275.1728	0.7512	
13.1604	1.5898	25.1343	275.2052	0.7512	
13.1280	1.5940	25.1343	275.0754	0.7512	
13.0634	1.6407	25.1343	275.0754	0.7797	
13.0877	1.6429	25.1343	275.0592	0.7655	
12.7563	1.6981	25.1343	274.9781	0.7797	
12.8209	1.7023	25.1343	274.8807	0.7797	
12.7563	1.7045	25.1343	274.8483	0.7797	
12.0397	1.7554	25.1179	274.6103	0.7607	
10.8812	1.8064	25.0852	274.6211	0.7797	
10.9701	1.8085	25.1098	274.6860	0.7512	
9.8306	1.8531	25.1343	274.5237	0.7655	
9.9599	1.8574	25.0852	274.4912	0.7512	
9.4992	1.8956	25.1098	274.5400	0.7655	

TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 149	POINTS 60	PoNOM 25.0000	X(cm) 60.1800	Pref 14.7540
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7393	0.0052	25.4621	291.2670	0.6642	
1.7474	0.0074	25.4621	291.3615	0.6642	
1.7365	0.0201	25.3311	289.6765	0.6642	
1.7311	0.0307	25.3147	288.7528	0.6642	
1.7474	0.0329	25.2656	288.8003	0.6642	
1.7474	0.0414	25.3147	288.1238	0.6642	
1.7636	0.0499	25.3638	287.0546	0.6642	
1.7636	0.0520	25.3393	287.3089	0.6642	
1.7799	0.0605	25.3638	286.6729	0.6642	
1.7799	0.0626	25.3638	286.6094	0.6928	
1.7799	0.0987	25.3638	286.0365	0.6642	
1.7962	0.1008	25.3393	285.8454	0.6642	
1.8124	0.1348	25.3311	285.3142	0.6642	
1.8450	0.1688	25.3393	284.7453	0.6642	
1.8450	0.1709	25.3638	284.7613	0.6642	
1.8829	0.2092	25.3147	284.6124	0.6642	
1.9100	0.2474	25.3311	284.1440	0.6642	
1.9506	0.2877	25.3638	283.6912	0.6642	
1.9588	0.2899	25.3638	283.5153	0.6642	
2.0076	0.3238	25.3147	282.7792	0.6642	
1.9995	0.3260	25.3393	282.9073	0.6642	
2.0402	0.3621	25.3147	282.6030	0.6785	
2.0401	0.3642	25.3147	282.5550	0.6642	
2.0889	0.3961	25.3147	282.2666	0.6642	
2.0808	0.3982	25.3393	282.2987	0.6642	
2.1540	0.4598	25.3638	281.9460	0.6642	
2.1215	0.4619	25.3638	281.9460	0.6642	
2.1702	0.5235	25.3638	281.8498	0.6642	
2.3573	0.5872	25.3638	281.5290	0.6642	
2.4847	0.6509	25.3638	281.0046	0.6642	
2.6690	0.7147	25.3311	280.7690	0.6642	
2.8805	0.7784	25.3147	280.5118	0.6642	
3.1841	0.8421	25.3638	280.4261	0.6546	
3.6015	0.9037	25.3638	280.0509	0.6642	
3.5609	0.9058	25.3393	280.0187	0.6642	
3.8943	0.9356	25.2656	279.7291	0.6642	
3.8293	0.9377	25.2901	279.8095	0.6642	
4.3823	1.0057	25.3147	279.3748	0.6642	
4.4310	1.0078	25.3147	279.3427	0.6642	
5.0003	1.0588	25.3393	279.2783	0.6642	
5.0328	1.0609	25.3147	279.3104	0.6642	
6.1876	1.1480	25.3147	279.1171	0.6642	
5.8786	1.1501	25.3638	279.0849	0.6642	
6.0738	1.1522	25.3638	279.0849	0.6642	
7.3262	1.2308	25.3638	279.0204	0.6642	
7.2692	1.2329	25.3393	279.1011	0.6642	
8.5515	1.3158	25.3638	278.7948	0.6642	
9.9177	1.4007	25.3147	278.5260	0.6642	
11.1484	1.4772	25.3638	278.3755	0.6928	
11.1321	1.4793	25.3638	278.5207	0.6642	
12.1460	1.5537	25.2983	278.4293	0.6642	
12.8562	1.6238	25.3147	278.0205	0.6642	
12.8400	1.6259	25.3393	277.9720	0.6642	
13.2059	1.6917	25.3147	277.9882	0.6642	
13.1815	1.6938	25.3147	277.9882	0.6642	
13.3441	1.7512	25.3638	277.9559	0.6642	
13.3279	1.7533	25.3638	277.8914	0.6642	
13.3604	1.7597	25.3638	277.9882	0.6642	
13.3767	1.8107	25.3393	277.6653	0.6642	
13.3604	1.8149	25.3147	277.6976	0.6642	



TABLE 5 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 148	POINTS 88	PoNOM 25.0000	X(cm) 61.4500	Pref 14.7652
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.8766	0.0095	24.9820	290.1772	0.6777	
1.8685	0.0116	24.9820	290.0982	0.6777	
1.8685	0.0137	24.8838	289.6554	0.6777	
1.8685	0.0159	24.8838	289.3864	0.6777	
1.8605	0.0244	24.8838	289.0854	0.6920	
1.8685	0.0265	24.8838	289.1171	0.6777	
1.8685	0.0350	24.9575	288.7369	0.6777	
1.8685	0.0371	25.0802	288.2930	0.6777	
1.8846	0.0435	25.1294	288.1978	0.6777	
1.9007	0.0456	25.2276	288.0075	0.6777	
1.9168	0.0477	25.3258	288.0392	0.7064	
1.9489	0.0541	25.4241	287.9123	0.7064	
1.9328	0.0562	25.4241	287.9229	0.6968	
1.9650	0.0902	25.5223	287.5312	0.6777	
1.9811	0.0923	25.5714	287.0705	0.7064	
1.9972	0.1263	25.5714	286.7684	0.7064	
2.0132	0.1284	25.6206	286.5617	0.6920	
2.0508	0.1667	25.6370	286.0577	0.7064	
2.0776	0.2028	25.6206	285.4949	0.6777	
2.0936	0.2049	25.6206	285.3513	0.7064	
2.1258	0.2410	25.5714	285.2717	0.7064	
2.1258	0.2431	25.5714	285.1760	0.7064	
2.1419	0.2792	25.5714	284.9527	0.7064	
2.1741	0.2835	25.5714	284.9527	0.7064	
2.2062	0.3196	25.6206	284.5698	0.6777	
2.1981	0.3217	25.5714	284.7772	0.7064	
2.2223	0.3557	25.5714	284.5059	0.7064	
2.2384	0.3600	25.5960	284.1865	0.7064	
2.2545	0.3939	25.6206	284.0907	0.7064	
2.2786	0.3961	25.5960	284.0906	0.7064	
2.2866	0.4322	25.6206	283.6752	0.7064	
2.3108	0.4343	25.5714	283.4833	0.7064	
2.3349	0.4725	25.5714	283.0674	0.6873	
2.3510	0.5086	25.5223	283.0353	0.7064	
2.3670	0.5108	25.5223	282.8753	0.7064	
2.3831	0.5426	25.5714	282.6511	0.6777	
2.3831	0.5447	25.5714	282.6190	0.7064	
2.3831	0.5469	25.5714	282.5229	0.7064	
2.3992	0.5872	25.5550	282.1704	0.6968	
2.4314	0.6509	25.5714	281.8498	0.7064	
2.4394	0.6531	25.5469	281.8498	0.7064	
2.4742	0.7189	25.5550	281.5932	0.6968	
2.4957	0.7678	25.5223	281.4006	0.7064	
2.5118	0.7699	25.4978	281.3685	0.7064	
2.5225	0.7805	25.5223	281.4006	0.7064	
2.5439	0.7933	25.5223	281.1758	0.7064	
2.5439	0.7954	25.5223	281.0795	0.7064	
2.5600	0.8081	25.5223	280.7261	0.7064	
2.5600	0.8103	25.5223	280.6940	0.7064	
2.5922	0.8591	25.5223	280.6297	0.6777	
2.6083	0.8612	25.4732	280.5976	0.7064	
2.7047	0.9271	25.5223	280.1796	0.7064	
2.6967	0.9292	25.5223	280.1796	0.7064	
2.7691	0.9887	25.5223	280.2439	0.7064	
2.8656	0.9929	25.4732	280.1152	0.6777	

**TABLE 3 - TOTAL PRESSURE LEEWARD** (continued, X61.4500)

TEST 47	RUN 148	POINTS 88	PoNOM 25.0000	X(cm) 61.4500	Prof 14.7652
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.8334	0.9950	25.4732	280.2117	0.7064	
3.0103	1.0566	25.4732	279.9865	0.7064	
3.0746	1.0588	25.4732	280.0187	0.7064	
3.3319	1.1246	25.5223	279.7934	0.6777	
3.3641	1.1267	25.4978	279.6325	0.7064	
3.7822	1.1905	25.4732	279.2138	0.7064	
3.8144	1.1926	25.5223	279.1494	0.7064	
3.7983	1.1947	25.5223	279.2299	0.7064	
4.2164	1.2563	25.5223	279.0043	0.7064	
4.2486	1.2584	25.5223	278.9882	0.7064	
4.8757	1.3243	25.5223	278.8593	0.7064	
4.7310	1.3264	25.5223	278.9076	0.7064	
5.5190	1.3944	25.4732	278.6659	0.6920	
5.5512	1.3965	25.5223	278.6981	0.7064	
6.3874	1.4560	25.4732	278.2465	0.6777	
6.3472	1.4581	25.4978	278.3594	0.7064	
7.4488	1.5176	25.5223	278.2465	0.7064	
7.1272	1.5197	25.5223	278.3755	0.7064	
7.4166	1.5239	25.5223	278.2787	0.7064	
8.2770	1.5770	25.5223	278.1173	0.7064	
8.3172	1.5791	25.5223	278.0205	0.7064	
9.0891	1.6344	25.4732	278.1173	0.6777	
9.2017	1.6365	25.4732	278.1496	0.6777	
9.2982	1.6386	25.4732	278.0851	0.7064	
10.2148	1.6896	25.5223	277.7299	0.7064	
10.1344	1.6917	25.4732	277.8107	0.7064	
10.9867	1.7406	25.4978	277.7945	0.6920	
10.9867	1.7427	25.5223	277.6653	0.7064	
11.6621	1.7873	25.4732	277.4391	0.7064	
11.6782	1.7894	25.4978	277.4391	0.7064	
12.3536	1.8340	25.5223	277.4391	0.7064	
12.3537	1.8362	25.5223	277.5360	0.7064	
12.7718	1.8744	25.4732	277.2614	0.7064	

TABLE 3 - TOTAL PRESSURE LEEWARD

TEST 47	RUN 147	POINTS 75	PoNOM 25.0000	X(cm) 62.7200	Pref 14.7665
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
2.1179	0.0116	25.4173	292.0080	0.8411	
2.1206	0.0137	25.4419	292.1601	0.8458	
2.1098	0.0201	25.3108	290.4670	0.8364	
2.0937	0.0307	25.3435	289.8452	0.8269	
2.1098	0.0329	25.3190	289.4180	0.8411	
2.1584	0.0414	25.3435	288.7686	0.8553	
2.1503	0.0435	25.2944	288.9745	0.8553	
2.2123	0.0520	25.3435	288.2507	0.8269	
2.2474	0.0605	25.3435	287.5471	0.8553	
2.2555	0.0626	25.3435	287.5630	0.8553	
2.2717	0.0690	25.3435	286.8744	0.8553	
2.3040	0.0775	25.3435	286.3867	0.8269	
2.2986	0.0796	25.3435	286.2700	0.8458	
2.3148	0.0881	25.3271	286.0258	0.8458	
2.3849	0.1242	25.3435	285.4311	0.8553	
2.3741	0.1263	25.3435	285.5161	0.8364	
2.4443	0.1582	25.3108	284.9527	0.8458	
2.4497	0.1603	25.2944	284.9208	0.8269	
2.5549	0.1985	25.2944	284.3622	0.8411	
2.5387	0.2007	25.3190	284.4740	0.8553	
2.6358	0.2368	25.2821	283.8190	0.8482	
2.7167	0.2750	25.2944	283.3553	0.8411	
2.7409	0.2771	25.3190	283.0194	0.8411	
2.8057	0.3132	25.2944	282.7472	0.8269	
2.8218	0.3154	25.2944	282.6671	0.8553	
2.8704	0.3472	25.2944	282.5550	0.8269	
2.9082	0.3493	25.3108	282.4055	0.8458	
3.0322	0.4131	25.3271	281.9995	0.8364	
2.9998	0.4152	25.2944	282.0422	0.8553	
3.1131	0.4725	25.3435	281.8498	0.8553	
3.1455	0.4747	25.2944	281.7856	0.8269	
3.1455	0.4768	25.2944	281.7536	0.8553	
3.2264	0.5384	25.2944	281.5183	0.8364	
3.2911	0.5978	25.2944	281.2722	0.8269	
3.3235	0.6000	25.2944	281.2882	0.8411	
3.3720	0.6616	25.2944	281.1116	0.8269	
3.3801	0.6637	25.2698	280.9028	0.8411	
3.4044	0.7253	25.2944	280.6297	0.8553	
3.4206	0.7274	25.2698	280.5493	0.8553	
3.4287	0.7911	25.2944	280.3886	0.8269	
3.4206	0.7933	25.2944	280.3082	0.8269	
3.4152	0.8527	25.2780	280.2439	0.8364	
3.4206	0.8549	25.2944	280.0187	0.8553	
3.4044	0.9165	25.2944	279.7720	0.8553	
3.3882	0.9186	25.2944	279.8900	0.8553	
3.3774	0.9738	25.2780	279.4930	0.8458	
3.3720	0.9908	25.2698	279.2944	0.8411	
3.3720	0.9950	25.2944	279.3427	0.8269	
3.3639	1.0035	25.2452	279.2299	0.8269	
3.3720	1.0057	25.2944	279.3104	0.8269	
3.3477	1.0524	25.2698	278.9721	0.8411	
3.3397	1.0545	25.2452	278.8915	0.8269	
3.3235	1.1374	25.2452	278.8432	0.8411	
3.3073	1.1395	25.2452	278.7625	0.8553	
3.3397	1.2181	25.2452	278.8270	0.8269	

**TABLE 5 - TOTAL PRESSURE LEEWARD** (continued, X62.7200)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>147</b>	<b>POINTS</b> <b>75</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>62.7200</b>	<b>Pref</b> <b>14.7665</b>
<b>P(psi)</b>	<b>Y(cm)</b>	<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>	
3.3451	1.2223	25.2780	278.7840	0.8458	
3.4125	1.3030	25.2452	278.5691	0.8411	
3.4367	1.3051	25.2452	278.4884	0.8269	
3.6309	1.3901	25.2452	278.4400	0.8553	
3.6040	1.3922	25.2452	278.4400	0.8364	
3.7928	1.4645	25.2452	278.2787	0.8553	
3.9168	1.4708	25.2452	278.2895	0.8553	
4.1326	1.5473	25.2452	278.3110	0.8269	
4.3429	1.5494	25.2698	278.1335	0.8553	
4.2458	1.5515	25.2944	278.2787	0.8269	
4.7717	1.6216	25.2452	277.9882	0.8553	
4.8446	1.6238	25.2452	278.0367	0.8411	
5.3786	1.6917	25.2452	277.7945	0.8269	
5.5566	1.6938	25.2452	277.5361	0.8269	
5.5485	1.6960	25.2452	277.6007	0.8553	
6.0906	1.7576	25.2452	277.4714	0.8269	
6.2605	1.7597	25.2452	277.5522	0.8269	
7.0130	1.8192	25.2698	277.3422	0.8553	
7.0777	1.8213	25.2944	277.3745	0.8269	
7.8760	1.8744	25.2616	277.2345	0.8553	

TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 158	POINTS 91	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7668
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.7830	0.1206	25.5255	299.7538	0.7665	
0.7890	0.1228	25.4764	299.0074	0.7944	
0.7951	0.1312	25.4273	297.8859	0.7944	
0.7991	0.1334	25.3292	297.3867	0.7665	
0.7991	0.1355	25.3783	297.6052	0.7944	
0.7951	0.1440	25.3292	296.3871	0.7944	
0.7991	0.1525	25.3292	295.0095	0.7944	
0.7991	0.1546	25.3292	295.5108	0.7665	
0.7951	0.1567	25.2801	295.3856	0.7665	
0.7951	0.1652	25.2801	294.6228	0.7758	
0.7951	0.1737	25.2801	293.5029	0.7944	
0.7991	0.1759	25.2801	293.3143	0.7665	
0.7951	0.1822	25.3047	292.9054	0.7804	
0.7910	0.1971	25.3292	292.4174	0.7665	
0.7910	0.2162	25.2801	291.9922	0.7944	
0.7910	0.2205	25.2310	291.8031	0.7944	
0.7870	0.2396	25.3292	291.3616	0.7665	
0.7870	0.2417	25.2310	291.2669	0.7944	
0.7810	0.2629	25.2801	290.8882	0.7665	
0.7830	0.2651	25.2801	290.7934	0.7665	
0.7770	0.2863	25.2556	290.5565	0.7804	
0.7790	0.2884	25.3292	290.5723	0.7944	
0.7750	0.3139	25.2637	289.8241	0.7851	
0.7730	0.3373	25.2801	289.5604	0.7944	
0.7710	0.3755	25.3292	289.2438	0.7944	
0.7710	0.3776	25.2801	289.0538	0.7944	
0.7669	0.3798	25.2801	289.1805	0.7944	
0.7690	0.4180	25.2801	288.7369	0.7944	
0.7710	0.4520	25.2801	288.4833	0.7944	
0.7710	0.4541	25.2801	288.5150	0.7665	
0.7696	0.4902	25.2801	288.0603	0.7851	
0.7669	0.5263	25.2801	287.9123	0.7944	
0.7710	0.5306	25.2801	287.7694	0.7944	
0.7710	0.5645	25.2801	287.6900	0.7944	
0.7710	0.5667	25.2801	287.6900	0.7944	
0.7710	0.6028	25.2310	287.3724	0.7665	
0.7710	0.6070	25.2801	287.1500	0.7665	
0.7669	0.6389	25.2801	286.9910	0.7944	
0.7710	0.6410	25.2310	286.9592	0.7665	
0.7669	0.6750	25.2801	286.8638	0.7944	
0.7710	0.6771	25.2801	286.7684	0.7944	
0.7710	0.7281	25.2801	286.6730	0.7665	
0.7710	0.7302	25.2801	286.6094	0.7665	
0.7710	0.7791	25.2801	286.4185	0.7665	
0.7710	0.7833	25.2801	286.4185	0.7665	
0.7710	0.7854	25.2801	286.2912	0.7944	
0.7730	0.8364	25.2556	286.1320	0.7665	
0.7750	0.8385	25.2310	286.1002	0.7944	
0.7710	0.8853	25.2310	285.9728	0.7944	
0.7750	0.8874	25.2801	285.8772	0.7944	
0.7737	0.9405	25.2801	285.8029	0.7851	
0.7790	1.0021	25.2310	285.7180	0.7944	
0.7790	1.0042	25.2801	285.6542	0.7944	
0.7790	1.0170	25.2310	285.3992	0.7944	
0.7810	1.0191	25.2556	285.3992	0.7804	

**TABLE 6 - STATIC PRESSURE LEEWARD** (continued, X55.1000)

TEST 47	RUN 158	POINTS 91	PoNOM 25.0000	X(cm) 55.1000	Pref 14.7668
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.7810	1.0297	25.2556	285.1601	0.7804	
0.7790	1.0340	25.2310	284.8571	0.7665	
0.7830	1.0361	25.2310	284.8571	0.7944	
0.7830	1.0510	25.2310	284.7134	0.7804	
0.7830	1.0531	25.2310	284.6974	0.7944	
0.7830	1.1104	25.2801	284.5059	0.7944	
0.7870	1.1125	25.2310	284.4421	0.7944	
0.7830	1.1656	25.2310	284.2824	0.7944	
0.7870	1.1720	25.2801	284.2504	0.7944	
0.7870	1.2272	25.2310	284.1546	0.7665	
0.7870	1.2315	25.2801	284.1226	0.7944	
0.7890	1.2888	25.2310	284.0587	0.7804	
0.7951	1.2931	25.2310	283.9948	0.7944	
0.7910	1.3504	25.1819	283.9309	0.7665	
0.7910	1.3547	25.2310	284.0268	0.7944	
0.7910	1.4099	25.2310	284.0587	0.7665	
0.7951	1.4142	25.1819	283.9629	0.7944	
0.7870	1.4715	25.1819	283.9948	0.7665	
0.7991	1.4736	25.2310	283.9629	0.7665	
0.7951	1.5289	25.2310	283.7072	0.7665	
0.7910	1.5310	25.2310	283.6112	0.7944	
0.7951	1.5331	25.2310	283.5153	0.7944	
0.7991	1.5989	25.2310	283.4993	0.7665	
0.7951	1.6627	25.2310	283.4193	0.7665	
0.7951	1.6648	25.2310	283.2914	0.7944	
0.7991	1.6690	25.2310	283.3553	0.7944	
0.7951	1.7328	25.2065	283.3713	0.7665	
0.7930	1.7944	25.2556	283.0514	0.7804	
0.7951	1.7986	25.1819	283.1314	0.7944	
0.7930	1.8538	25.2310	282.9233	0.7944	
0.7951	1.8560	25.2310	283.0674	0.7665	
0.7971	1.9091	25.2310	282.9073	0.7804	
0.7951	1.9112	25.2310	282.7151	0.7944	
0.7991	1.9622	25.2801	282.6671	0.7804	
0.7991	1.9643	25.2801	282.7792	0.7665	
0.7951	2.0004	25.2801	282.6511	0.7665	

TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 159	POINTS 91	PoNOM 25.0000	X(cm) 57.0050	Pref 14.7563
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5760	0.1482	25.2755	298.1353	0.8264	
1.5780	0.1503	25.2019	297.5583	0.7981	
1.5679	0.1715	25.0791	296.0117	0.7981	
1.5679	0.1736	25.0299	295.8552	0.7981	
1.5539	0.1949	24.9808	294.4293	0.7981	
1.5518	0.1970	24.9808	294.2567	0.7981	
1.5357	0.2140	24.8826	293.6914	0.7698	
1.5438	0.2182	24.9317	293.3929	0.7698	
1.5357	0.2416	24.9317	292.4017	0.7981	
1.5337	0.2437	24.9072	292.4332	0.7840	
1.5236	0.2607	24.9317	291.2985	0.7698	
1.5236	0.2628	24.9317	291.6770	0.7840	
1.5075	0.2841	24.9317	290.7302	0.7981	
1.5035	0.2862	24.9317	290.8091	0.7981	
1.4794	0.3223	24.9317	290.1614	0.7981	
1.4834	0.3244	24.9072	290.2089	0.7981	
1.4539	0.3584	24.9317	289.7503	0.7981	
1.4431	0.3924	24.9317	289.1805	0.7981	
1.4411	0.3945	24.9563	289.1013	0.7981	
1.4230	0.4306	24.8826	288.5467	0.7981	
1.4190	0.4328	24.9072	288.6418	0.7981	
1.4110	0.4753	24.9808	288.3247	0.7981	
1.4069	0.4774	24.9317	288.0709	0.7981	
1.4110	0.4795	24.9317	288.2613	0.7981	
1.4029	0.5241	24.9317	287.6265	0.7981	
1.4029	0.5262	24.9808	287.4677	0.7981	
1.4029	0.5708	24.9317	287.2135	0.7981	
1.4029	0.5751	24.9072	287.1341	0.7981	
1.3976	0.6239	24.9153	287.0016	0.7981	
1.3908	0.6707	24.8826	286.5457	0.7981	
1.3908	0.6749	24.8826	286.4662	0.7981	
1.3788	0.7195	24.9317	286.1320	0.7981	
1.3748	0.7216	24.9563	286.0842	0.7840	
1.3425	0.7790	24.8826	285.7817	0.7698	
1.3365	0.7832	24.9317	285.6224	0.7981	
1.2714	0.8448	24.9317	285.3886	0.7887	
1.2138	0.9086	24.9317	285.0485	0.7981	
1.1936	0.9107	24.9153	284.9846	0.7981	
1.0951	0.9701	24.9808	284.6017	0.7981	
1.0890	0.9744	24.9317	284.6336	0.7698	
1.0125	1.0317	24.9317	284.1866	0.7698	
0.9924	1.0360	24.9317	284.1546	0.7981	
1.0085	1.0402	24.9317	284.1866	0.7981	
0.9280	1.0912	24.9317	283.9309	0.7981	
0.9321	1.0933	24.8826	283.8990	0.7981	
0.9361	1.0955	24.8826	283.9629	0.7981	
0.8851	1.1549	24.9153	283.8457	0.7981	
0.8757	1.1613	24.8826	283.4513	0.7981	
0.8717	1.1634	24.9072	283.4513	0.7840	
0.8596	1.1698	24.9317	283.2274	0.7981	
0.8636	1.1719	24.9317	283.1634	0.7981	
0.8636	1.1741	24.9317	283.1314	0.7981	
0.8556	1.1953	24.9317	283.1634	0.7981	
0.8576	1.1974	24.8826	283.0834	0.7981	
0.8475	1.2526	24.8826	283.0674	0.7981	

**TABLE 6 - STATIC PRESSURE LEEWARD** (continued, X57.0050)

TEST 47	RUN 159	POINTS 91	PoNOM 25.0000	X(cm) 57.0050	Pref 14.7563
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
0.8475	1.2548	24.9317	283.0034	0.7981	
0.8516	1.2569	24.9317	283.0353	0.7981	
0.8415	1.3121	24.9317	282.7632	0.7981	
0.8435	1.3164	24.9317	282.7151	0.7698	
0.8435	1.3695	24.9317	282.4589	0.7981	
0.8395	1.3737	24.9317	282.3948	0.7840	
0.8435	1.4289	24.9317	282.0102	0.7981	
0.8435	1.4311	24.9317	282.1063	0.7981	
0.8435	1.4353	24.8826	282.0422	0.7981	
0.8395	1.4884	24.9317	281.8819	0.7981	
0.8435	1.4905	24.9808	281.7856	0.7981	
0.8435	1.4948	24.8826	281.7536	0.7981	
0.8435	1.4969	24.9317	281.8498	0.7981	
0.8435	1.5500	24.8826	281.7536	0.7981	
0.8435	1.5521	24.8826	281.4969	0.7981	
0.8395	1.5543	24.8826	281.6252	0.7698	
0.8475	1.6074	24.9317	281.4969	0.7981	
0.8435	1.6095	24.8826	281.4327	0.7981	
0.8435	1.6647	24.9317	281.4327	0.7698	
0.8455	1.6668	24.8826	281.4327	0.7981	
0.8395	1.7263	24.9317	281.3364	0.7698	
0.8455	1.7327	24.9317	281.2240	0.7981	
0.8395	1.7921	24.8826	281.0795	0.7981	
0.8475	1.7943	24.9317	280.9832	0.7981	
0.8462	1.7964	24.9317	281.0153	0.7981	
0.8475	1.8537	24.9317	281.0153	0.7981	
0.8455	1.8559	24.9072	281.0153	0.7981	
0.8475	1.8580	24.8826	280.9832	0.7981	
0.8475	1.9068	24.8826	280.8546	0.7981	
0.8462	1.9111	24.8826	280.6833	0.7981	
0.8475	1.9578	24.9317	280.4690	0.7981	
0.8496	1.9599	24.9072	280.5654	0.7981	
0.8475	1.9621	24.8826	280.5333	0.7981	
0.8435	1.9961	24.8826	280.5333	0.7981	
0.8496	2.0045	24.8581	280.5172	0.7981	
0.8516	2.0407	24.8826	280.3725	0.7698	



TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 163	POINTS 83	PoNOM 25.0000	X(cm) 57.6400	Pref 14.7445
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.6430	0.1418	25.1741	292.5277	0.7916	
1.6715	0.1439	25.6165	293.2512	0.8200	
1.6755	0.1460	25.5673	293.3457	0.7916	
1.6159	0.1694	24.8791	291.5088	0.7916	
1.6132	0.1906	24.9283	290.1614	0.7916	
1.6105	0.2097	24.9283	289.7503	0.7916	
1.6085	0.2140	24.9283	289.6554	0.7916	
1.6085	0.2331	25.0512	289.0221	0.7774	
1.6064	0.2352	25.0757	289.0538	0.7916	
1.6023	0.2544	25.0757	288.7686	0.7916	
1.6105	0.2565	25.1249	288.4516	0.7774	
1.5983	0.2756	25.0512	287.9440	0.7916	
1.5983	0.2777	25.0266	287.9440	0.7632	
1.5901	0.2968	25.0266	287.4518	0.7774	
1.5779	0.3351	25.0266	287.0228	0.7632	
1.5738	0.3372	25.0266	286.9910	0.7916	
1.5616	0.3712	25.0266	286.8320	0.7632	
1.5535	0.3754	25.0020	286.7843	0.7774	
1.5393	0.4137	25.0757	286.5457	0.7916	
1.5291	0.4158	25.0757	286.4821	0.7916	
1.5128	0.4625	25.0266	286.2275	0.7916	
1.5006	0.4646	25.0266	286.0365	0.7632	
1.5047	0.4668	24.9774	286.1320	0.7916	
1.4844	0.5156	24.9774	285.7180	0.7916	
1.4762	0.5177	24.9774	285.5267	0.7916	
1.4762	0.5220	25.0266	285.6861	0.7916	
1.4579	0.5857	24.9774	285.3514	0.7774	
1.4559	0.5878	24.9283	285.0804	0.7916	
1.4477	0.6494	24.9774	284.9527	0.7916	
1.4477	0.6515	24.9774	284.7932	0.7916	
1.4477	0.6537	24.9774	284.8571	0.7916	
1.4477	0.7174	25.0266	284.6974	0.7916	
1.4477	0.7195	25.0266	284.5060	0.7774	
1.4477	0.7854	25.0266	284.3782	0.7916	
1.4477	0.7875	25.0266	284.3462	0.7632	
1.4437	0.7896	25.0266	284.2504	0.7916	
1.4437	0.8576	25.0102	283.7498	0.7727	
1.4396	0.9213	25.0266	283.5792	0.7916	
1.4396	0.9234	25.0266	283.5792	0.7916	
1.4396	0.9255	25.0266	283.4833	0.7632	
1.4274	0.9829	25.0266	283.2914	0.7916	
1.4355	0.9850	24.9774	283.1634	0.7916	
1.4315	0.9893	24.9774	282.9713	0.7632	
1.4315	0.9914	25.0266	283.0353	0.7916	
1.4111	1.0487	24.9774	282.7151	0.7916	
1.4111	1.0509	24.9774	282.6511	0.7632	
1.4071	1.0551	24.9774	282.5870	0.7916	
1.3338	1.1316	24.9774	282.5870	0.7632	
1.3583	1.1337	24.9774	282.4268	0.7632	
1.3460	1.1358	24.9774	282.4909	0.7916	
1.2118	1.2017	25.0266	282.2346	0.7916	
1.1955	1.2038	25.0266	282.2025	0.7916	
1.1874	1.2059	24.9774	282.1384	0.7632	
1.1020	1.2675	24.9774	281.9139	0.7632	
1.0633	1.2718	24.9774	281.8498	0.7916	

**TABLE 6 - STATIC PRESSURE LEEWARD** (continued, X57.6400)

<b>TEST</b> <b>47</b>	<b>RUN</b> <b>163</b>	<b>POINTS</b> <b>83</b>	<b>PoNOM</b> <b>25.0000</b>	<b>X(cm)</b> <b>57.6400</b>	<b>Pref</b> <b>14.7445</b>
<b>P(psi)</b>	<b>Y(cm)</b>		<b>Po(psi)</b>	<b>To(deg.K)</b>	<b>Pw(psi)</b>
1.0166	1.2845		24.9283	281.4327	0.7916
1.0125	1.2866		24.9774	281.3685	0.7916
1.0105	1.2888		24.9774	281.4006	0.7916
0.9962	1.2930		24.9774	281.4327	0.7916
0.9921	1.2972		24.9774	281.4006	0.7632
0.9799	1.3100		24.9774	281.2722	0.7632
0.9657	1.3121		24.9774	281.1759	0.7916
0.9149	1.3737		24.9283	281.2079	0.7632
0.8986	1.3780		24.9774	281.1758	0.7916
0.8945	1.3801		24.9774	281.2079	0.7916
0.8552	1.4502		24.9447	280.8653	0.7821
0.8294	1.5224		24.9283	280.8225	0.7632
0.8254	1.5245		24.9283	280.7100	0.7774
0.8132	1.5904		24.9283	280.6618	0.7632
0.8172	1.5946		24.9529	280.7100	0.7916
0.8132	1.6711		24.9774	280.5976	0.7632
0.8132	1.6732		24.9283	280.5654	0.7916
0.8172	1.6753		24.9774	280.5976	0.7632
0.8172	1.7497		24.9283	280.3243	0.7774
0.8112	1.7518		24.9283	280.2761	0.7916
0.8172	1.8219		24.9283	280.1796	0.7916
0.8172	1.8240		24.9283	280.1474	0.7632
0.8132	1.8283		24.9283	280.2117	0.7632
0.8132	1.8941		24.9283	280.1152	0.7916
0.8193	1.8962		24.9283	280.1313	0.7774
0.8172	1.9599		24.9283	280.0830	0.7916
0.8152	1.9621		24.9283	280.0509	0.7774
0.8193	2.0130		24.9283	279.8417	0.7774

TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 160	POINTS 77	PoNOM 25.0000	X(cm) 58.2750	Pref 14.7457
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.6853	0.1397	25.2902	298.5504	0.7967	
1.7000	0.1630	25.2575	296.6059	0.7967	
1.6940	0.1651	25.1839	296.1837	0.7967	
1.6840	0.1843	25.0284	294.1520	0.7873	
1.6779	0.2034	25.0121	293.2514	0.7967	
1.6739	0.2246	24.9630	292.4648	0.7826	
1.6699	0.2459	24.9630	291.8346	0.7826	
1.6719	0.2480	24.9630	291.5824	0.7967	
1.6679	0.2650	24.9630	291.0302	0.7967	
1.6639	0.2671	24.9630	290.6987	0.7967	
1.6652	0.2990	24.9794	290.2668	0.7873	
1.6559	0.3351	24.9630	289.7186	0.7684	
1.6539	0.3372	24.9139	289.3863	0.7967	
1.6458	0.3712	24.9630	288.8795	0.7826	
1.6438	0.3733	24.9630	288.8320	0.7967	
1.6358	0.4094	24.9794	288.6418	0.7873	
1.6224	0.4561	25.0121	288.0921	0.7778	
1.5957	0.5050	24.9630	287.7853	0.7967	
1.5957	0.5071	24.9876	287.7376	0.7967	
1.5743	0.5560	24.9630	287.2453	0.7967	
1.5475	0.6048	24.9630	286.7684	0.7967	
1.5515	0.6069	24.9630	286.7684	0.7967	
1.5475	0.6091	24.9139	286.8320	0.7967	
1.5354	0.6537	25.0121	286.5139	0.7967	
1.5274	0.6558	24.9630	286.3707	0.7967	
1.5114	0.7046	24.9630	286.0683	0.7684	
1.5134	0.7089	24.9876	286.1320	0.7967	
1.4973	0.7747	24.9630	285.7657	0.7826	
1.4993	0.7769	24.9630	285.8135	0.7967	
1.4933	0.8385	24.9876	285.4630	0.7826	
1.4953	0.8406	24.9630	285.5267	0.7967	
1.4913	0.9043	25.0121	285.2398	0.7684	
1.4913	0.9064	24.9630	285.0804	0.7684	
1.4873	0.9086	24.9630	285.2079	0.7684	
1.4833	0.9701	25.0121	284.7294	0.7684	
1.4873	0.9723	24.9630	284.6656	0.7684	
1.4833	0.9744	24.9630	284.6017	0.7684	
1.4833	1.0402	24.9630	284.5698	0.7684	
1.4773	1.0424	24.9630	284.3143	0.7826	
1.4732	1.1040	24.9630	284.0428	0.7826	
1.4752	1.1061	24.9139	284.0268	0.7684	
1.4752	1.1677	24.9139	284.0268	0.7967	
1.4712	1.1698	24.9630	283.9629	0.7967	
1.4712	1.2272	24.9139	283.7072	0.7967	
1.4712	1.2293	24.9139	283.7551	0.7826	
1.4672	1.2718	24.9630	283.5792	0.7967	
1.4712	1.2739	25.0121	283.5473	0.7684	
1.4672	1.2824	24.9630	283.3873	0.7684	
1.4712	1.2845	24.9630	283.3713	0.7967	
1.4672	1.2888	24.9139	283.1634	0.7967	
1.4692	1.2909	24.9384	283.1314	0.7967	
1.4692	1.3185	25.0612	282.9553	0.7967	
1.4712	1.3206	25.0611	282.9393	0.7967	
1.4391	1.3886	25.0121	282.6831	0.7967	
1.4331	1.3928	25.0121	282.6831	0.7826	

**TABLE 6 - STATIC PRESSURE LEEWARD** (continued, X58.2750)

TEST 47	RUN 160	POINTS 77	PoNOM 25.0000	X(cm) 58.2750	Prof 14.7457
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.3789	1.4566	24.9630	282.6831	0.7967	
1.3669	1.4608	24.9630	282.5550	0.7967	
1.3588	1.4629	24.9630	282.4268	0.7967	
1.2124	1.5330	24.9384	282.0583	0.7826	
1.2384	1.5351	25.0121	282.1704	0.7967	
1.0846	1.5989	24.9303	281.8712	0.7778	
0.9816	1.6647	24.9139	281.7856	0.7684	
0.9615	1.6668	24.9139	281.6733	0.7967	
0.8953	1.7327	24.7666	281.4488	0.7967	
0.8973	1.7348	24.7666	281.4006	0.7684	
0.8591	1.7943	24.8648	281.4327	0.7967	
0.8571	1.7964	24.8648	281.3685	0.7967	
0.8411	1.8559	24.9139	281.4006	0.7826	
0.8411	1.8580	24.9139	281.4648	0.7967	
0.8331	1.9111	24.9630	281.3685	0.7684	
0.8371	1.9132	24.9630	281.2401	0.7967	
0.8371	1.9153	24.9630	281.2401	0.7967	
0.8371	1.9663	24.9630	280.9832	0.7967	
0.8371	1.9684	24.9630	281.0313	0.7967	
0.8371	2.0130	24.9384	280.8065	0.7826	
0.8371	2.0152	24.9630	280.9189	0.7684	
0.8331	2.0513	24.9630	280.7582	0.7967	

TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 162	POINTS 83	PoNOM 25.0000	X(cm) 58.9100	Pref 14.7445
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7232	0.1397	24.9897	292.0474	0.7777	
1.7009	0.1609	24.7563	291.3143	0.7777	
1.7009	0.1630	24.7071	290.9987	0.7777	
1.6948	0.1821	24.6948	290.2088	0.7635	
1.6874	0.2013	24.6334	289.0221	0.7777	
1.6928	0.2225	24.7808	288.7052	0.7777	
1.7049	0.2246	25.0020	288.6260	0.7635	
1.8227	0.2565	26.9928	288.7844	0.8346	
1.8288	0.2586	27.0419	288.9587	0.8346	
1.8268	0.2607	26.9928	288.6101	0.8346	
1.8085	0.2883	26.7224	287.3406	0.8346	
1.8085	0.2905	26.6978	287.2453	0.8061	
1.8024	0.3266	26.6487	287.0546	0.8346	
1.7943	0.3287	26.6323	286.7472	0.8346	
1.7862	0.3648	26.5995	286.0683	0.8061	
1.7767	0.3669	26.3701	285.8347	0.8251	
1.7456	0.4030	26.0097	285.2398	0.8061	
1.7456	0.4052	25.9605	285.2398	0.8061	
1.7253	0.4349	25.8622	285.0485	0.8061	
1.7293	0.4391	25.8868	285.0005	0.8061	
1.7293	0.4413	25.8622	285.0165	0.8061	
1.7131	0.4859	25.8458	284.6549	0.7966	
1.6968	0.5284	25.8622	284.2504	0.8061	
1.6968	0.5305	25.8131	284.3143	0.8061	
1.6928	0.5326	25.8131	284.3143	0.7777	
1.6765	0.5899	25.8131	284.1866	0.8061	
1.6705	0.5921	25.7885	284.1226	0.7919	
1.6481	0.6473	25.8131	283.7072	0.8061	
1.6441	0.6515	25.8131	283.7711	0.8061	
1.6129	0.7110	25.7967	283.4513	0.7872	
1.5913	0.7684	25.7148	283.2274	0.7777	
1.5832	0.7705	25.6165	283.1154	0.7919	
1.5507	0.8278	25.3215	282.6831	0.8061	
1.5425	0.8300	25.2232	282.6725	0.7777	
1.5243	0.8916	25.1249	282.6030	0.7635	
1.5182	0.8937	25.1249	282.5870	0.7777	
1.5141	0.9489	25.0757	282.5550	0.7777	
1.5121	0.9532	25.1249	282.4909	0.7777	
1.5121	1.0063	25.2232	282.2025	0.7777	
1.5101	1.0105	25.3215	282.1704	0.8061	
1.5222	1.0679	25.6164	282.2986	0.7777	
1.5263	1.0700	25.6656	282.2025	0.8061	
1.5283	1.0721	25.7394	282.2185	0.7919	
1.5263	1.1252	25.8622	282.1704	0.8061	
1.5263	1.1273	25.9114	282.1704	0.8346	
1.5344	1.1316	25.9114	282.0422	0.8061	
1.5304	1.1847	25.9114	282.0422	0.7777	
1.5263	1.1868	25.9605	281.9460	0.8061	
1.5263	1.1889	25.9605	281.9781	0.8061	
1.5222	1.2463	25.9605	281.5611	0.8062	
1.5263	1.2505	25.9114	281.5932	0.8061	
1.5222	1.2526	25.9114	281.6894	0.8061	
1.5141	1.2824	25.9114	281.6894	0.8061	
1.5195	1.2909	25.9605	281.5076	0.7966	
1.5182	1.2994	25.9605	281.3685	0.8061	

**TABLE 6 - STATIC PRESSURE LEEWARD** (continued, X58.9100)

TEST 47	RUN 162	POINTS 83	PoNOM 25.0000	X(cm) 58.9100	Prof 14.7445
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5181	1.3036	25.9851	281.3203	0.7919	
1.5222	1.3100	25.9114	281.1116	0.8061	
1.5222	1.3121	25.9114	281.1758	0.8061	
1.5182	1.3142	26.0097	281.1758	0.8346	
1.5263	1.3270	26.2063	281.1758	0.8061	
1.5283	1.3291	26.0589	281.1758	0.8203	
1.5263	1.3312	26.0588	281.0795	0.7777	
1.5182	1.4077	25.8622	280.8546	0.8061	
1.5182	1.4119	25.7639	280.5976	0.7777	
1.5182	1.4141	25.7639	280.7261	0.8346	
1.5141	1.5012	25.8131	280.5333	0.8346	
1.5101	1.5054	25.8131	280.5333	0.8061	
1.5060	1.5925	25.8131	280.5976	0.7777	
1.5081	1.5946	25.8868	280.4529	0.7919	
1.4654	1.6774	25.9114	280.3404	0.8061	
1.4532	1.6817	25.9114	280.3404	0.8061	
1.4492	1.6838	25.9114	280.2760	0.7777	
1.3578	1.7645	25.9360	280.3243	0.8203	
1.3233	1.7667	25.9605	280.3725	0.8061	
1.1507	1.8452	25.9605	280.1313	0.8061	
1.1324	1.8516	25.9605	280.0509	0.8061	
1.0188	1.9132	26.0097	279.8900	0.8346	
0.9944	1.9196	25.9605	279.8578	0.8061	
0.9985	1.9217	25.9605	279.9221	0.8346	
0.9254	1.9854	25.9605	279.6968	0.8061	
0.9071	1.9876	25.9605	279.6325	0.8061	
0.8766	2.0343	25.9605	279.6968	0.8061	
0.8645	2.0385	25.9605	279.6968	0.8346	

TABLE 6 - STATIC PRESSURE LEEWARD

TEST 47	RUN 161	POINTS 93	PoNOM 25.0000	X(cm) 60.1800	Pref 14.7451
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.7584	0.1375	25.1712	296.2620	0.7596	
1.7604	0.1397	25.1221	295.6674	0.7596	
1.7503	0.1588	24.9254	294.1311	0.7596	
1.7483	0.1609	24.8763	293.9114	0.7596	
1.7462	0.1821	24.8271	293.0627	0.7596	
1.7442	0.1843	24.8517	292.9368	0.7596	
1.7381	0.1991	24.8025	291.9292	0.7596	
1.7381	0.2013	24.8763	291.8661	0.7596	
1.7442	0.2225	24.8763	291.3932	0.7596	
1.7462	0.2246	24.8763	291.0460	0.7596	
1.7462	0.2544	24.8271	290.5723	0.7596	
1.7462	0.2586	24.9254	290.4143	0.7596	
1.7463	0.2883	24.8517	289.7186	0.7455	
1.7462	0.2905	24.8271	289.6554	0.7879	
1.7422	0.3244	24.8763	289.0538	0.7313	
1.7442	0.3266	24.8517	289.2597	0.7596	
1.7422	0.3606	24.8271	288.7686	0.7596	
1.7462	0.3627	24.8763	288.4516	0.7596	
1.7462	0.3648	24.8763	288.5784	0.7596	
1.7462	0.4094	24.8271	288.2613	0.7596	
1.7462	0.4115	24.9254	287.8805	0.7596	
1.7462	0.4137	24.8517	288.0868	0.7596	
1.7422	0.4540	24.8763	287.4041	0.7313	
1.7462	0.4561	24.8763	287.3724	0.7596	
1.7462	0.4583	24.8763	287.4041	0.7596	
1.7381	0.5029	24.8763	287.1817	0.7596	
1.7422	0.5071	24.8517	287.0546	0.7596	
1.7462	0.5496	24.9746	286.5139	0.7596	
1.7422	0.5538	24.9009	286.7048	0.7455	
1.7381	0.6006	24.9090	286.2063	0.7596	
1.7341	0.6027	24.9254	286.1957	0.7596	
1.7260	0.6494	24.8517	285.5586	0.7596	
1.7240	0.6515	24.8763	285.6543	0.7455	
1.7179	0.6983	24.8271	285.1760	0.7596	
1.7119	0.7004	24.8271	285.0166	0.7455	
1.7058	0.7450	24.8763	284.9847	0.7596	
1.6997	0.7471	24.8763	284.6815	0.7596	
1.6815	0.8045	24.9254	284.5059	0.7596	
1.6774	0.8066	24.8271	284.4101	0.7596	
1.6855	0.8087	24.8763	284.4740	0.7596	
1.6592	0.8661	24.8763	284.1706	0.7596	
1.6572	0.8703	24.8271	284.1226	0.7596	
1.6248	0.9255	24.8763	283.8350	0.7596	
1.6248	0.9298	24.8763	283.5792	0.7596	
1.6289	0.9319	24.8763	283.8031	0.7596	
1.5965	0.9893	24.8271	283.5153	0.7596	
1.5965	0.9914	24.8517	283.5793	0.7596	
1.5762	1.0487	24.8763	283.3234	0.7596	
1.5722	1.0509	24.8271	283.1314	0.7596	
1.5722	1.0530	24.8271	283.0353	0.7596	
1.5601	1.0976	24.8763	282.9073	0.7596	
1.5581	1.0997	24.8517	282.8273	0.7455	
1.5520	1.1146	24.9254	282.8112	0.7596	
1.5479	1.1188	24.9254	282.6991	0.7455	
1.5540	1.1316	24.9746	282.6351	0.7596	

TABLE 6 - STATIC PRESSURE LEEWARD (continued, X60.1800)

TEST 47	RUN 161	POINTS 93	PoNOM 25.0000	X(cm) 60.1800	Pref 14.7451
P(psi)	Y(cm)	Po(psi)	To(deg.K)	Pw(psi)	
1.5520	1.1337	24.9746	282.6190	0.7596	
1.5479	1.1379	24.8763	282.4589	0.7596	
1.5480	1.1401	24.8763	282.3147	0.7596	
1.5439	1.1422	24.9254	282.3628	0.7596	
1.5398	1.1719	24.8271	281.9781	0.7596	
1.5358	1.1762	24.8271	281.9353	0.7596	
1.5236	1.2357	24.7779	281.8819	0.7596	
1.5236	1.2378	24.7779	281.6894	0.7596	
1.5236	1.2399	24.8025	281.7054	0.7455	
1.5153	1.3015	24.8763	281.6252	0.7596	
1.5115	1.3036	24.8763	281.5610	0.7313	
1.5155	1.3057	24.8763	281.6252	0.7596	
1.5115	1.3695	24.9746	281.4327	0.7596	
1.5074	1.3716	24.9746	281.4006	0.7455	
1.4994	1.4332	24.9254	281.3685	0.7596	
1.4994	1.4353	24.9254	281.3685	0.7596	
1.4913	1.4374	24.9254	281.2079	0.7596	
1.4953	1.4396	24.9254	281.2722	0.7596	
1.4832	1.5033	24.8763	281.1758	0.7596	
1.4832	1.5054	24.8763	281.2079	0.7596	
1.4791	1.5649	24.8763	281.0795	0.7596	
1.4751	1.5691	24.8517	281.0634	0.7596	
1.4670	1.6392	24.8271	280.7261	0.7313	
1.4670	1.6435	24.8517	280.6136	0.7596	
1.4589	1.7029	24.8271	280.5011	0.7596	
1.4629	1.7051	24.8271	280.5333	0.7596	
1.4589	1.7072	24.7779	280.5654	0.7596	
1.4589	1.7093	24.7779	280.5333	0.7596	
1.4548	1.7730	24.8271	280.4368	0.7596	
1.4548	1.7752	24.8271	280.5976	0.7596	
1.4548	1.7773	24.8271	280.5654	0.7596	
1.4508	1.8452	24.8599	280.3404	0.7596	
1.4508	1.8983	24.8763	280.2117	0.7596	
1.4467	1.9005	24.8763	280.1474	0.7313	
1.4508	1.9047	24.8763	280.1152	0.7596	
1.4386	1.9557	24.8763	280.1152	0.7313	
1.4427	1.9642	24.8517	280.0187	0.7596	
1.4386	2.0067	24.8271	279.8900	0.7596	



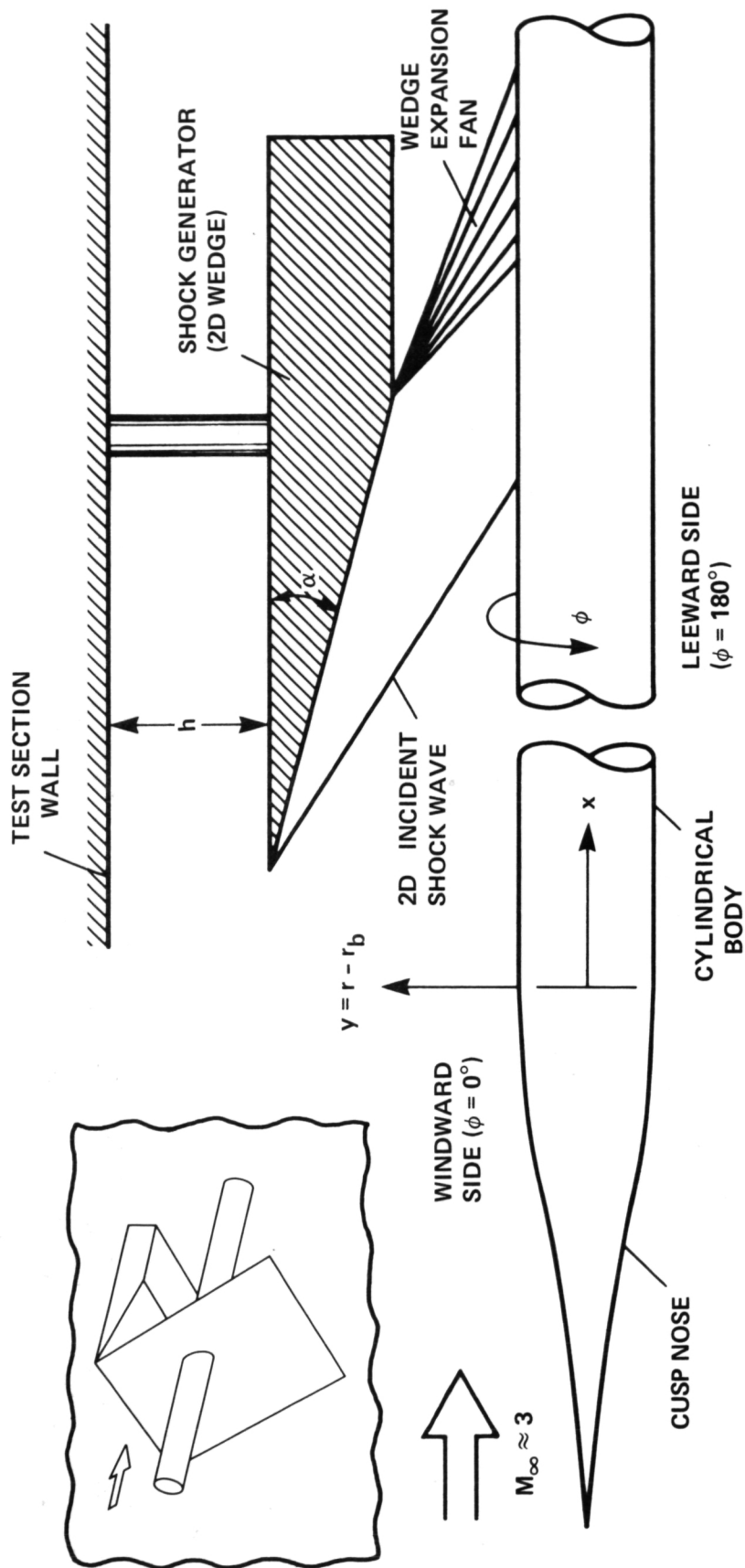


Figure 1.- Schematic of test setup.

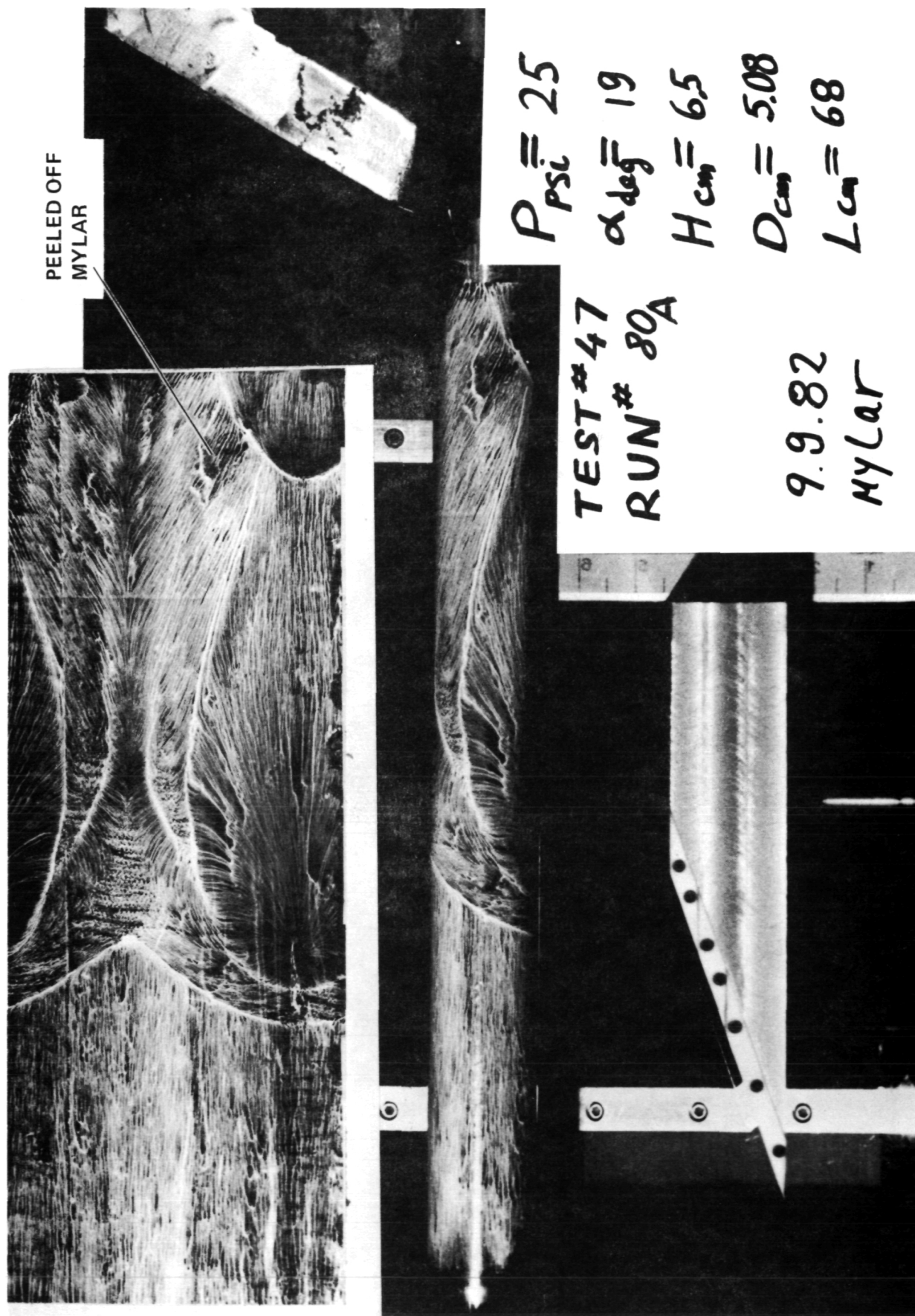


Figure 2.- Typical oil flow visualization results for a 19° shock generator 6.5 cm from the tunnel wall at Mach = 3.

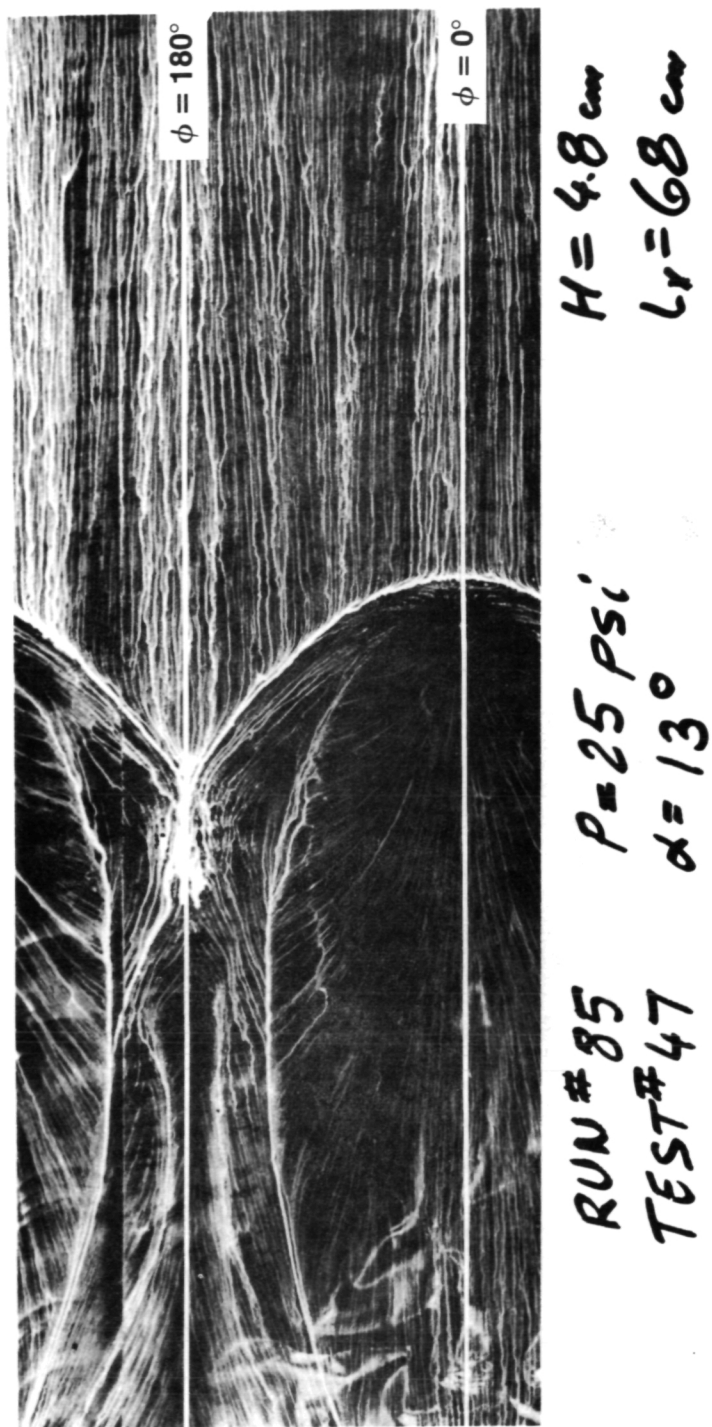


RUN#84 P=25psi  
TEST#47  $\alpha = 13^\circ$

H=0  
Lx=68

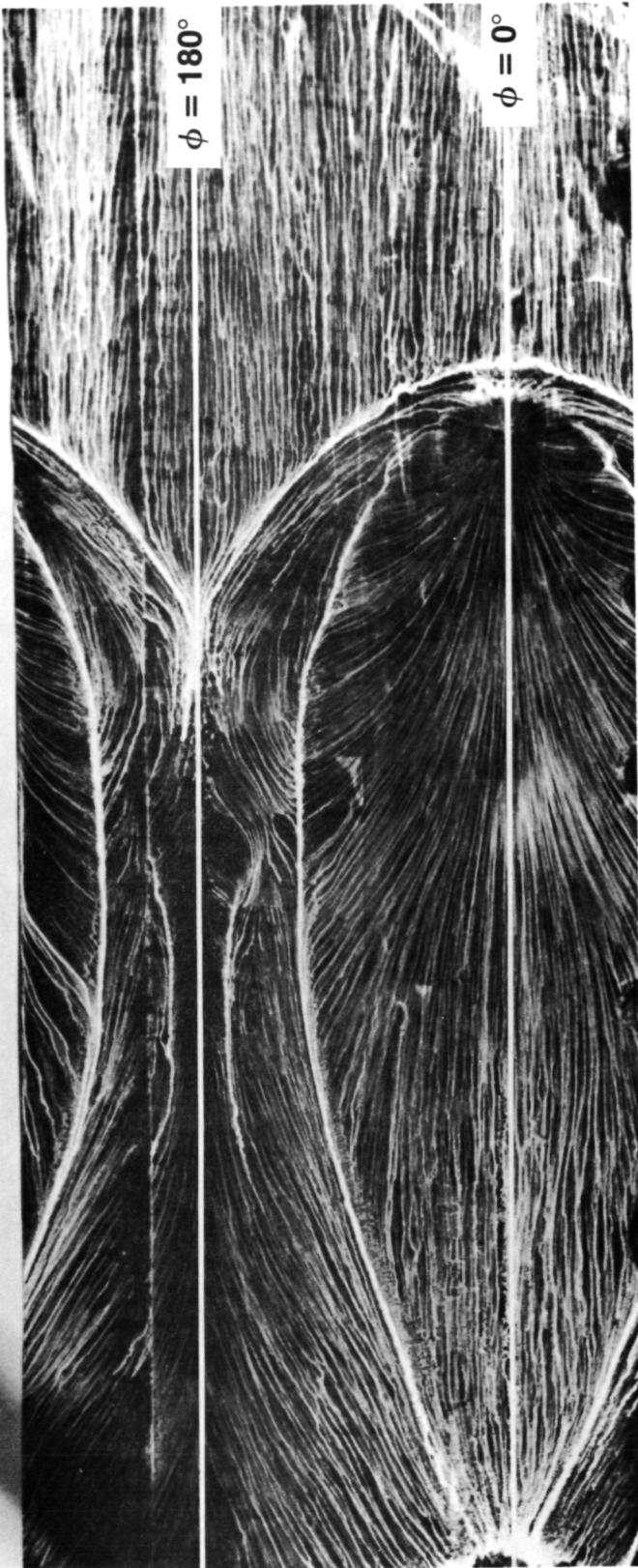
(a)  $P_T = 25$  psia,  $\alpha = 13^\circ$ ,  $h = 0$  cm.

Figure 3.- Surface oil flow patterns.



(b)  $P_T = 25$  psia,  $\alpha = 13^\circ$ ,  $h = 4.8$  cm.

Figure 3.- Continued.

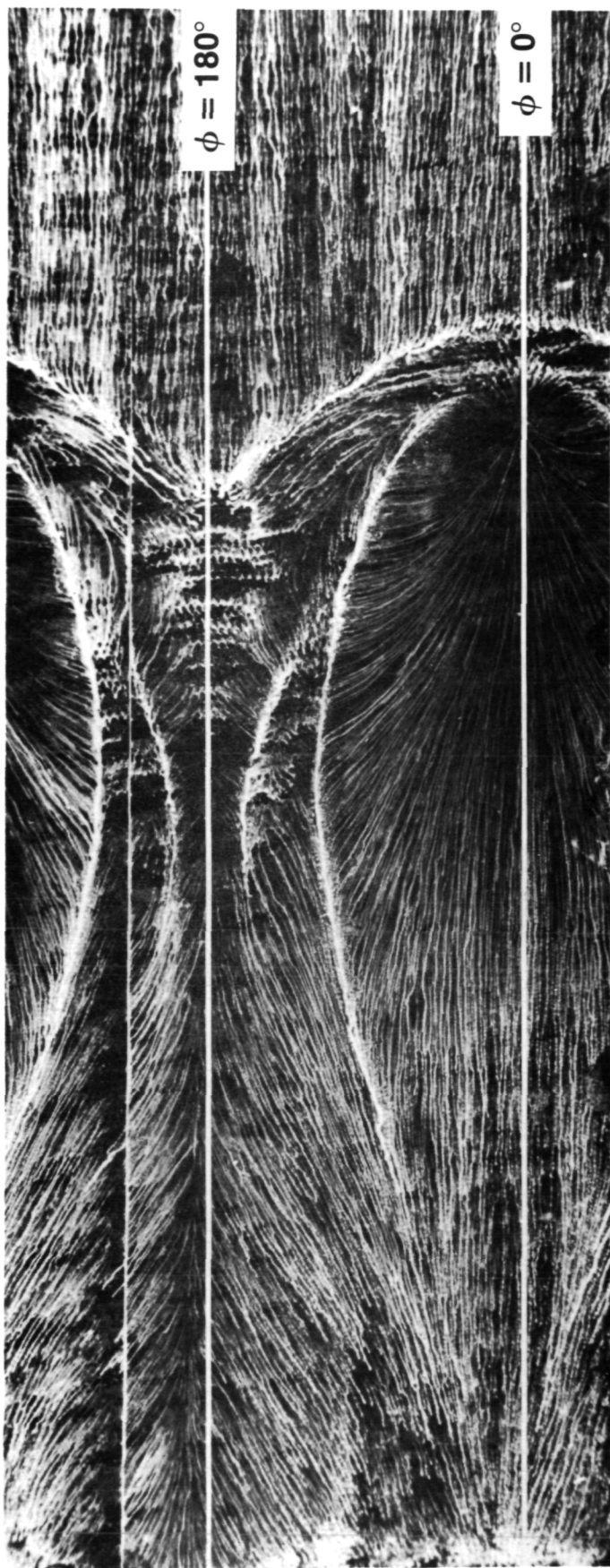


RUN # 83       $P = 25 \text{ psi}$        $H = 8 \text{ cm}$   
 TEST # 47       $\alpha = 13^\circ$        $L_x = 68 \text{ cm}$

(c)  $P_T = 25 \text{ psia}$ ,  $\alpha = 13^\circ$ ,  $h = 8.0 \text{ cm}$ .

Figure 3.- Continued.





RUN# 87  
TEST#47

$P = 10 \text{ psi}$   
 $\alpha = 16^\circ$

$H = 6.5 \text{ cm}$   
 $Lx = 68 \text{ cm}$

(d)  $P_T = 10 \text{ psia}$ ,  $\alpha = 16^\circ$ ,  $h = 6.5 \text{ cm}$ .

Figure 3.- Continued.

RUN#88  
 TEST#47  
 P = 25 psi  
 $\alpha = 16^\circ$   
 H = 0 cm  
 Lx = 68 cm



(e)  $P_T = 25$  psia,  $\alpha = 16^\circ$ ,  $h = 0$  cm.

Figure 3.- Continued.

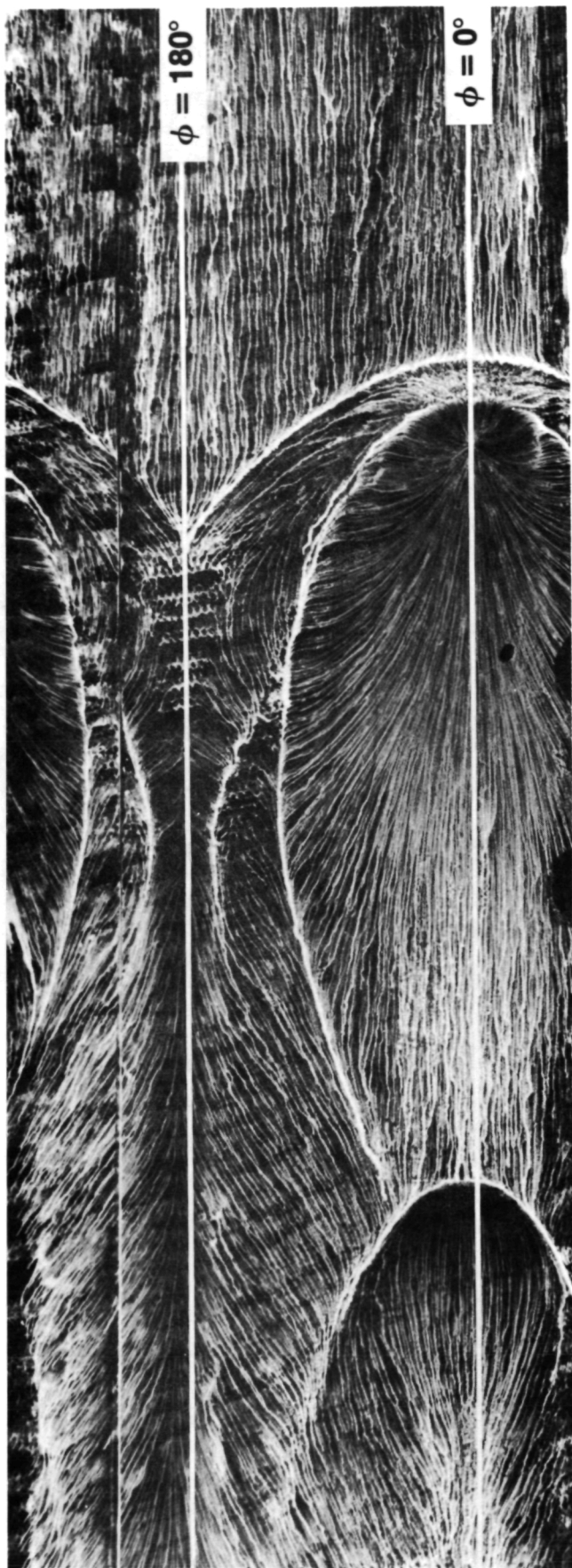


TEST#47    P=25psi  
 RUN#79     $\alpha=16^\circ$   
              H=6.5cm  
              Lx=68cm

(f)  $P_T = 25$  psia,  $\alpha = 16^\circ$ ,  $h = 6.5$  cm.

Figure 3.- Continued.





RUN # 89     $P = 25 \text{ psi}$      $H = 8 \text{ cm}$   
 TEST # 47     $\alpha = 16^\circ$      $L_x = 68 \text{ cm}$

(g)  $P_T = 25 \text{ psia}$ ,  $\alpha = 16^\circ$ ,  $h = 8.0 \text{ cm}$ .

Figure 3.- Continued.



RUN# 86      P = 80 psi      H = 6.5 cm  
 TEST# 47       $\alpha = 16^\circ$       Lx = 68 cm

(h)  $P_T = 80$  psia,  $\alpha = 16^\circ$ ,  $h = 6.5$  cm.

Figure 3.- Continued.



TEST #47     $P = 25 \text{ psi}$      $H = 0 \text{ in}$   
 RUN #82     $\alpha = 19^\circ$      $Lx = 68$

(1)  $P_T = 25 \text{ psia}$ ,  $\alpha = 19^\circ$ ,  $h = 0 \text{ cm}$ .

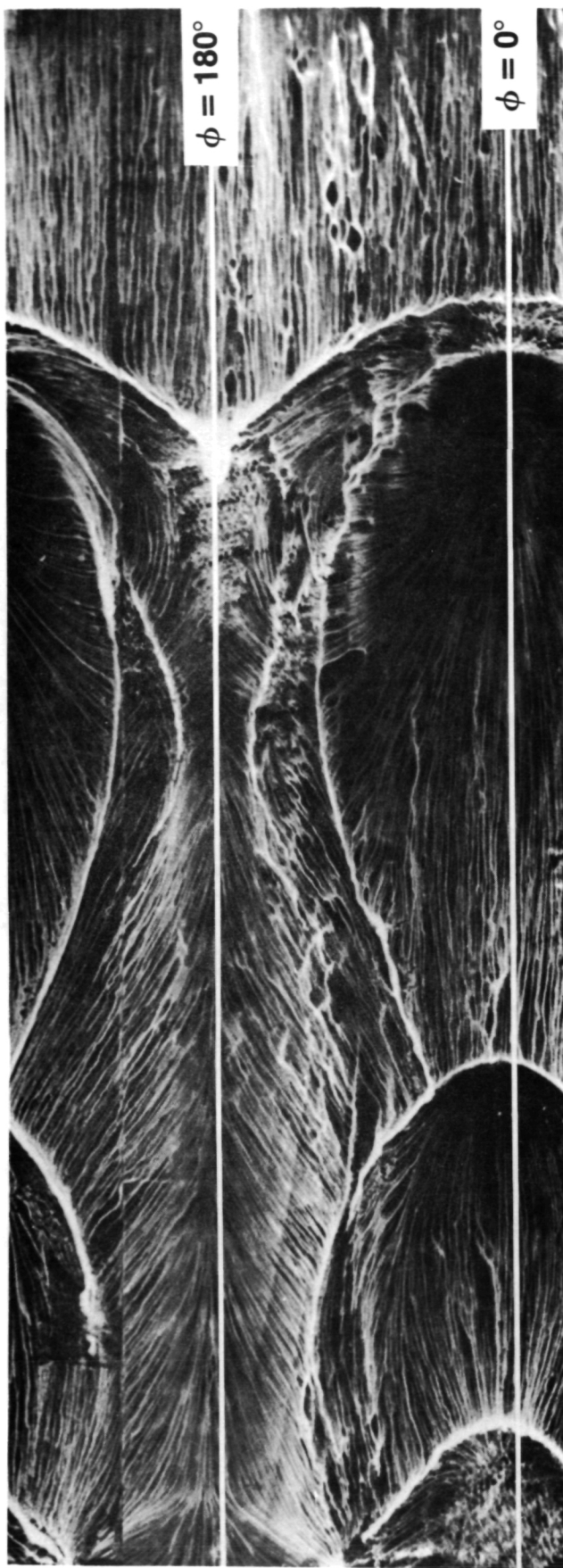
Figure 3.- Continued.



TEST #47    P=25 PSI    H=6.7 cm  
 RUN #80A     $\alpha=19^\circ$      $L_x=68$  cm

(J)  $P_T = 25$  psia,  $\alpha = 19^\circ$ ,  $h = 6.7$  cm.

Figure 3.- Continued.

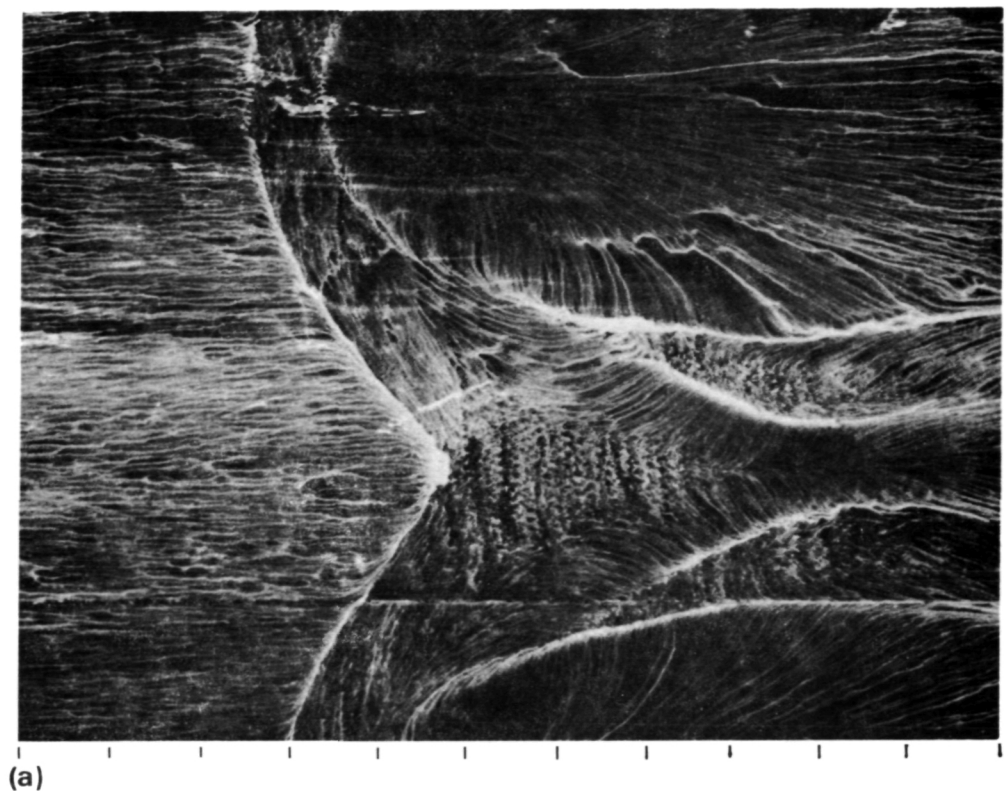


TEST #47     $P = 25 \text{ PSI}$      $H = 8 \text{ cm}$   
 RUN #81     $\alpha = 19^\circ$      $L_x = 68 \text{ cm}$

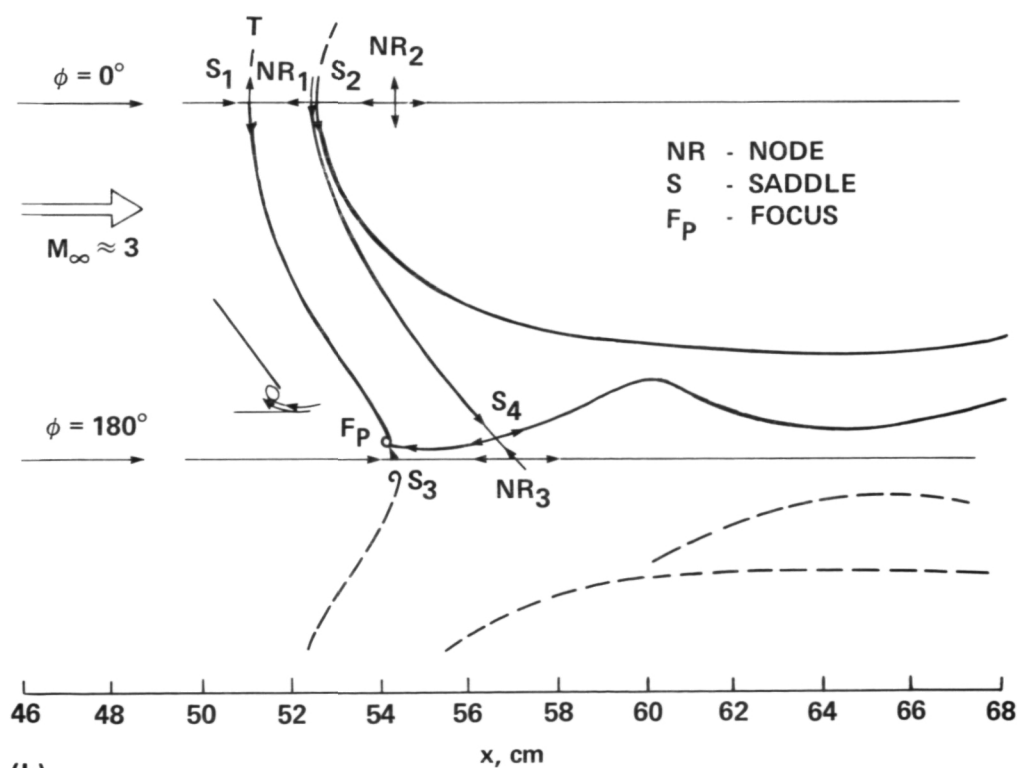
(k)  $P_T = 25 \text{ psia}$ ,  $\alpha = 19^\circ$ ,  $h = 8.0 \text{ cm}$ .

Figure 3.- Concluded.





(a)



(b)

Figure 4.- Typical oil-flow patterns for  $19^\circ$  shock generator at  $M = 3$ .  
(a) Oil-flow patterns on unwrapped Mylar; (b) skin-friction lines.

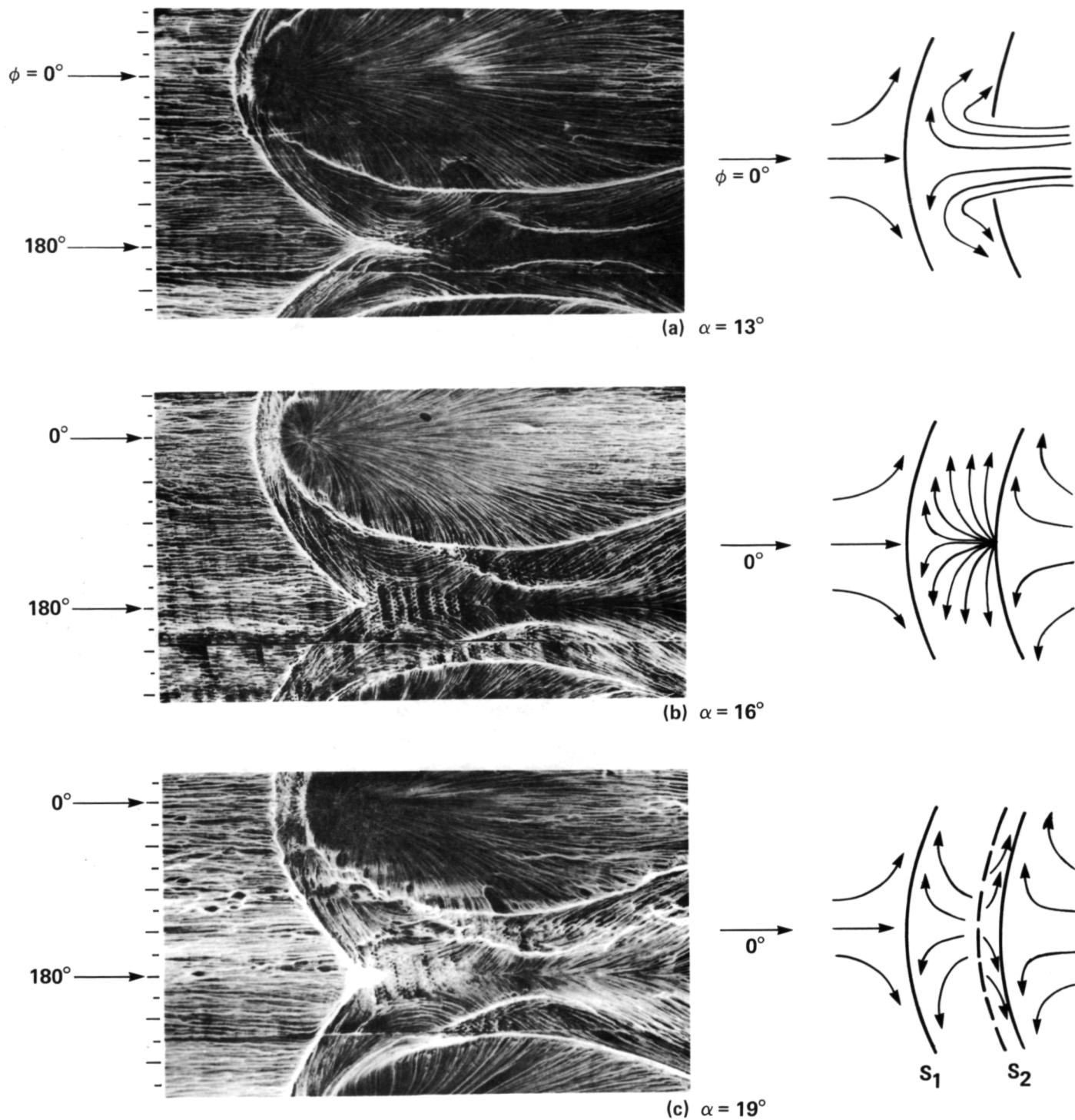


Figure 5.- Effect of wedge angle  $\alpha$  on the windward separation pattern at  $M = 3$ .  
 (a)  $\alpha = 13^\circ$ ; (b)  $\alpha = 16^\circ$ ; (c)  $\alpha = 19^\circ$ .

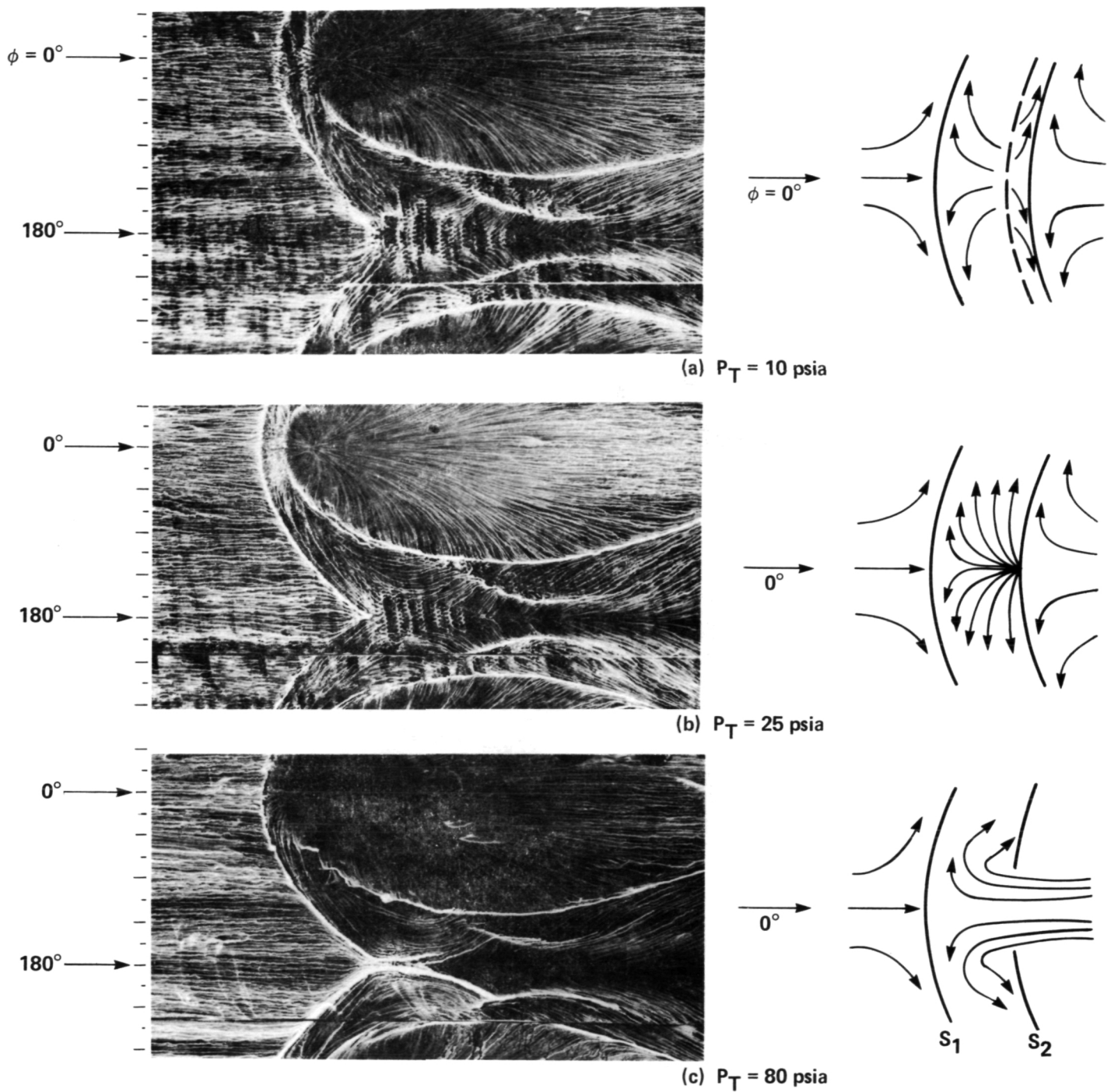


Figure 6.- Effect of total pressure on the windward separation pattern generated by  $16^\circ$  wedge at  $M = 3$ . (a)  $P_T = 10$  psia; (b)  $P_T = 25$  psia; (c)  $P_T = 80$  psia.



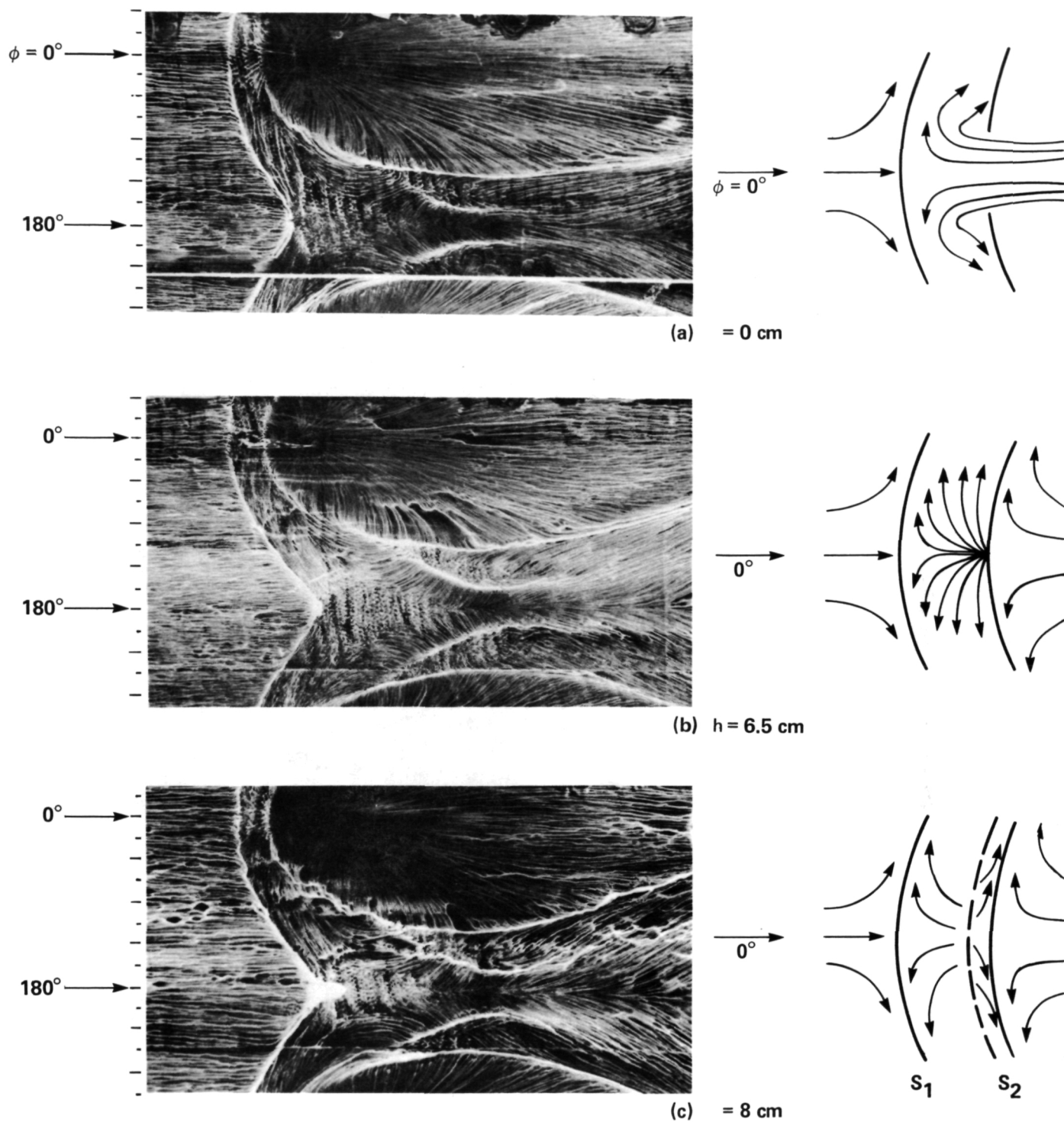


Figure 7.- Effect of shock generator distance  $h$  from the tunnel wall on the windward separation pattern at  $M = 3$ . (a)  $h = 0$  cm; (b)  $h = 6.5$  cm; (c)  $h = 8$  cm.

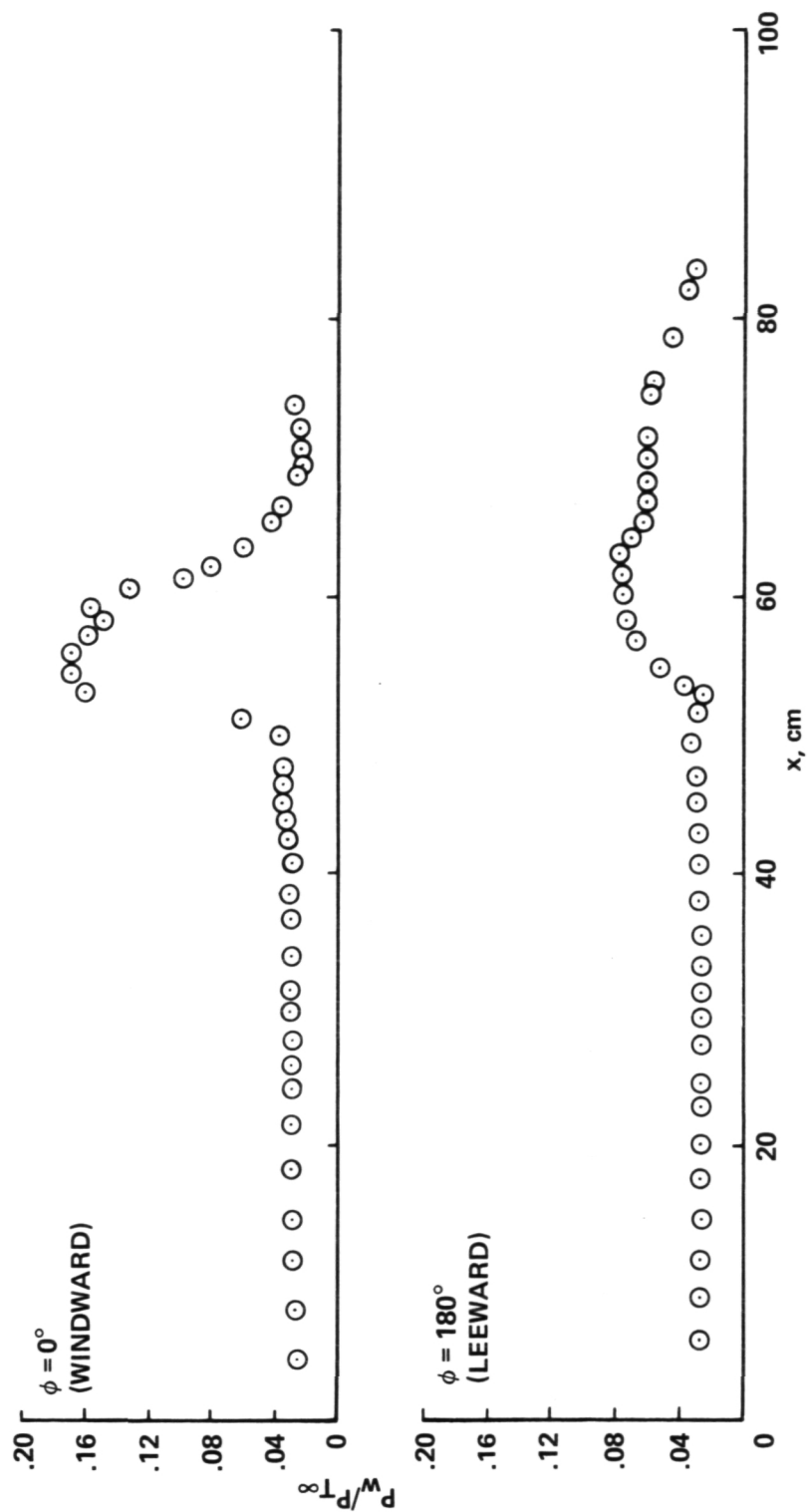


Figure 8.- Measured static-pressure distribution on a cylinder with impinging shock wave at  $M = 3$ .

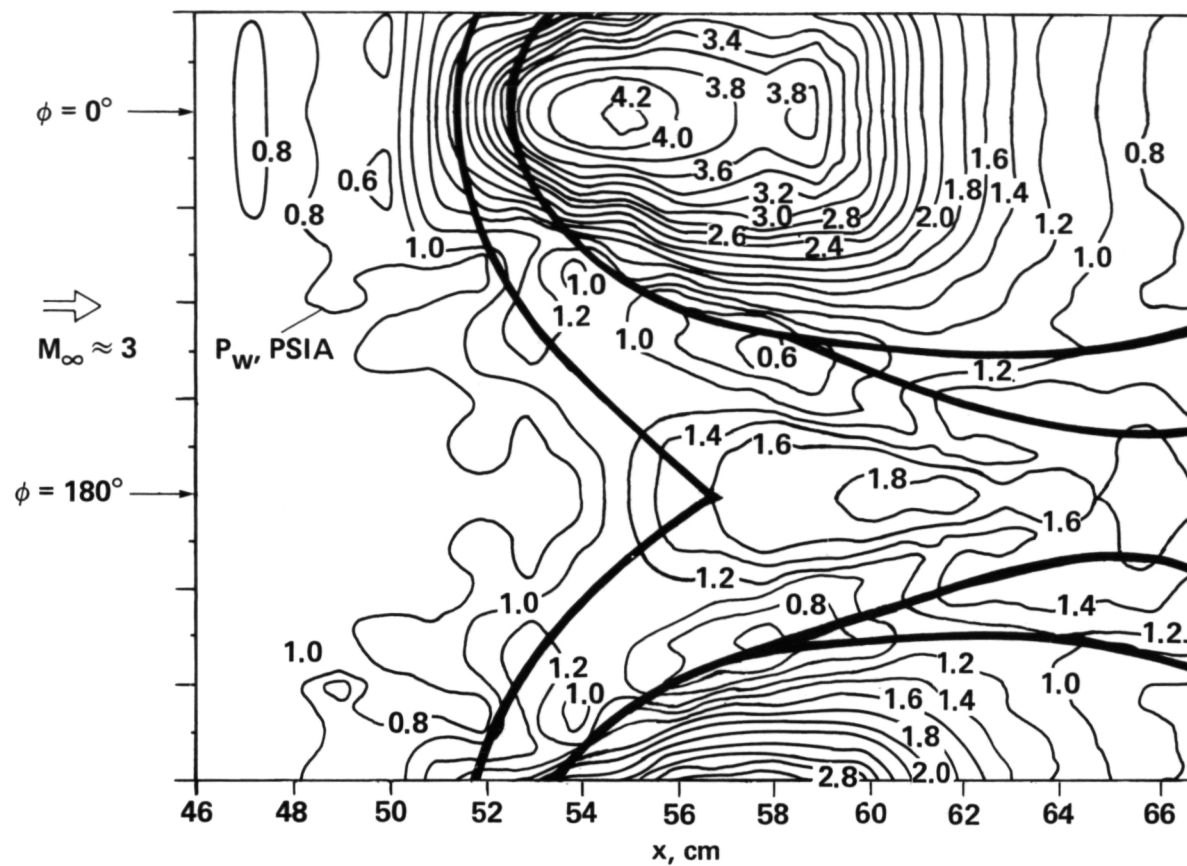
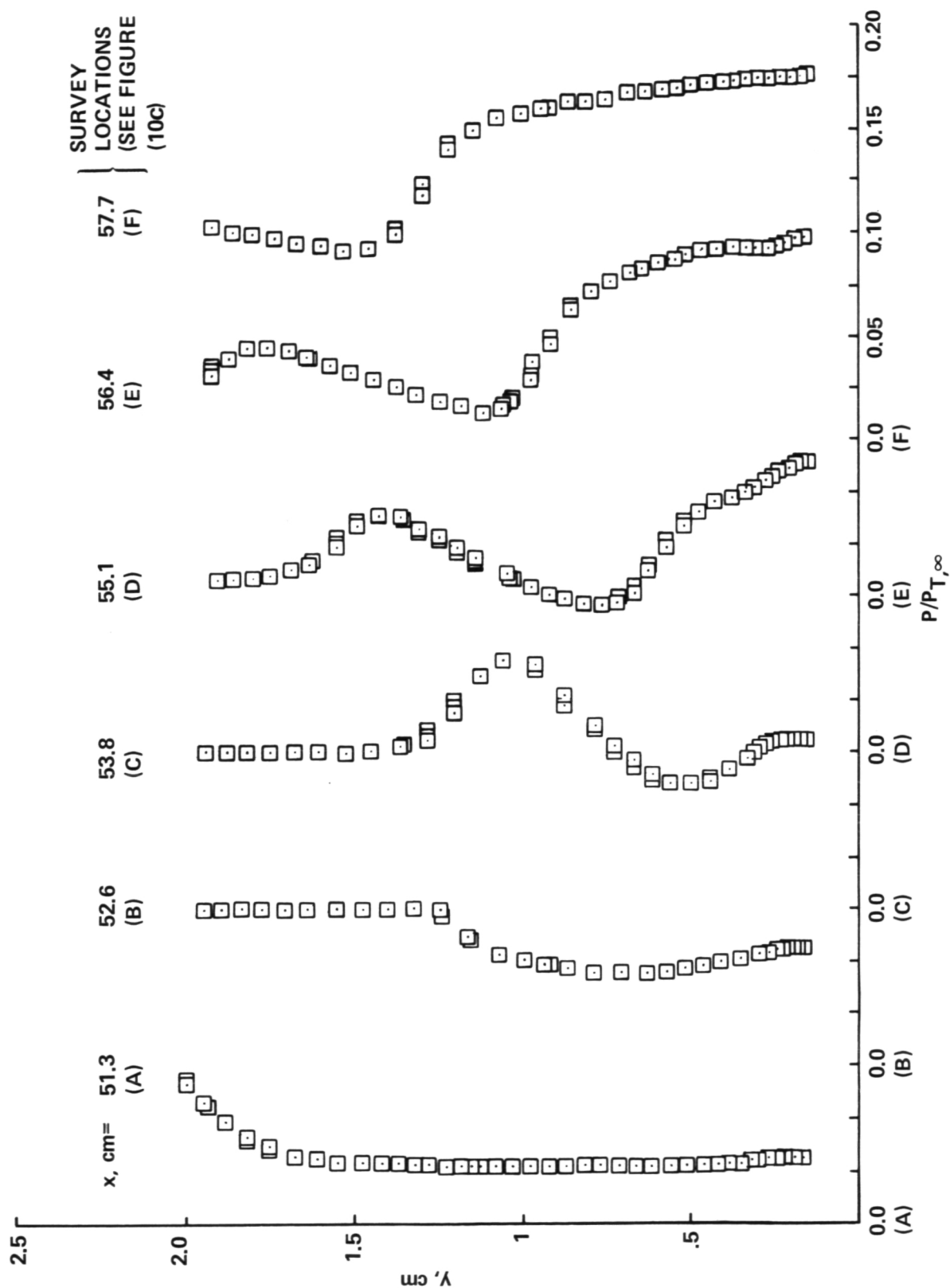
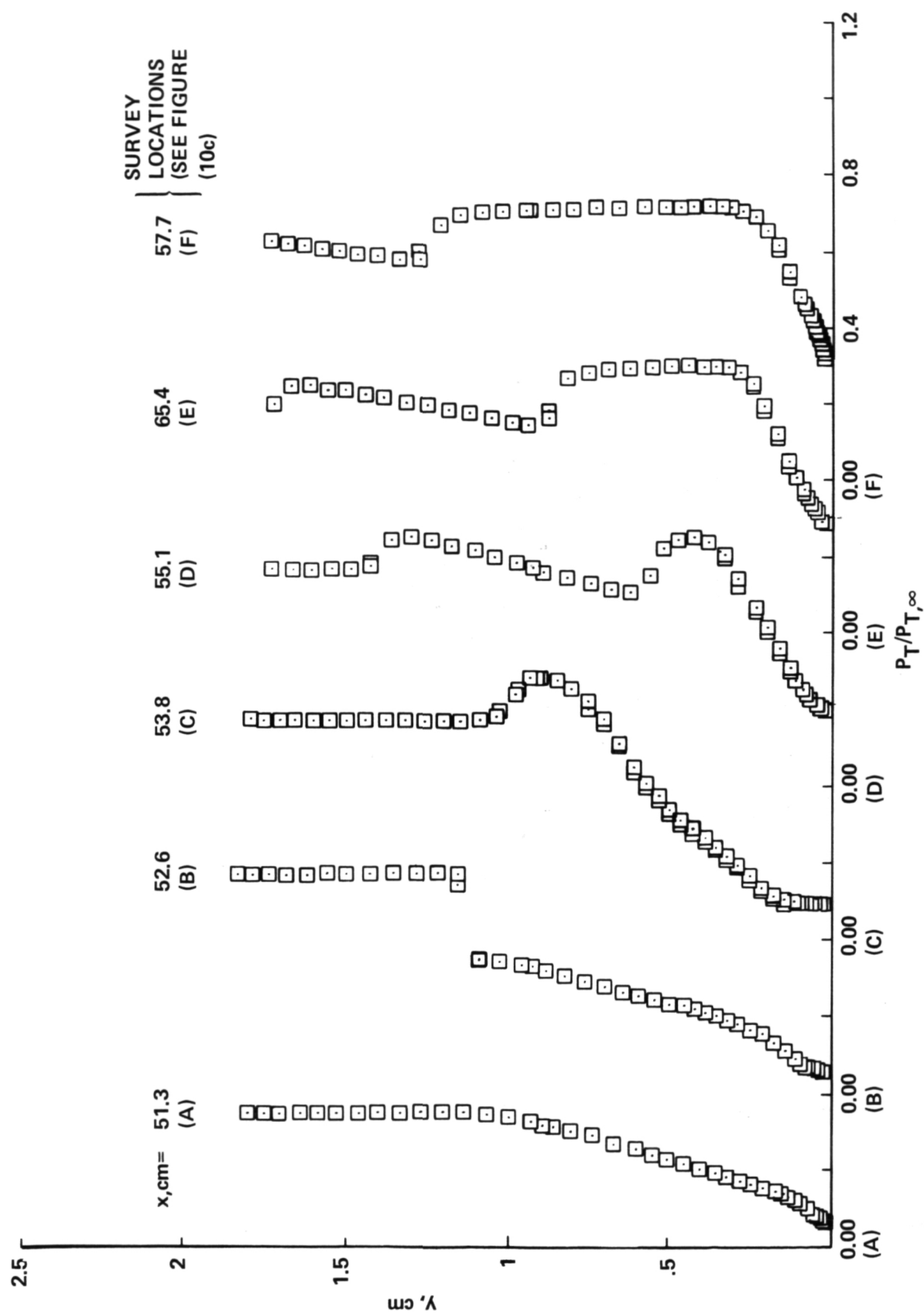


Figure 9.- Measured surface-pressure contours on a cylinder with impinging shock wave at  $M = 3$ .



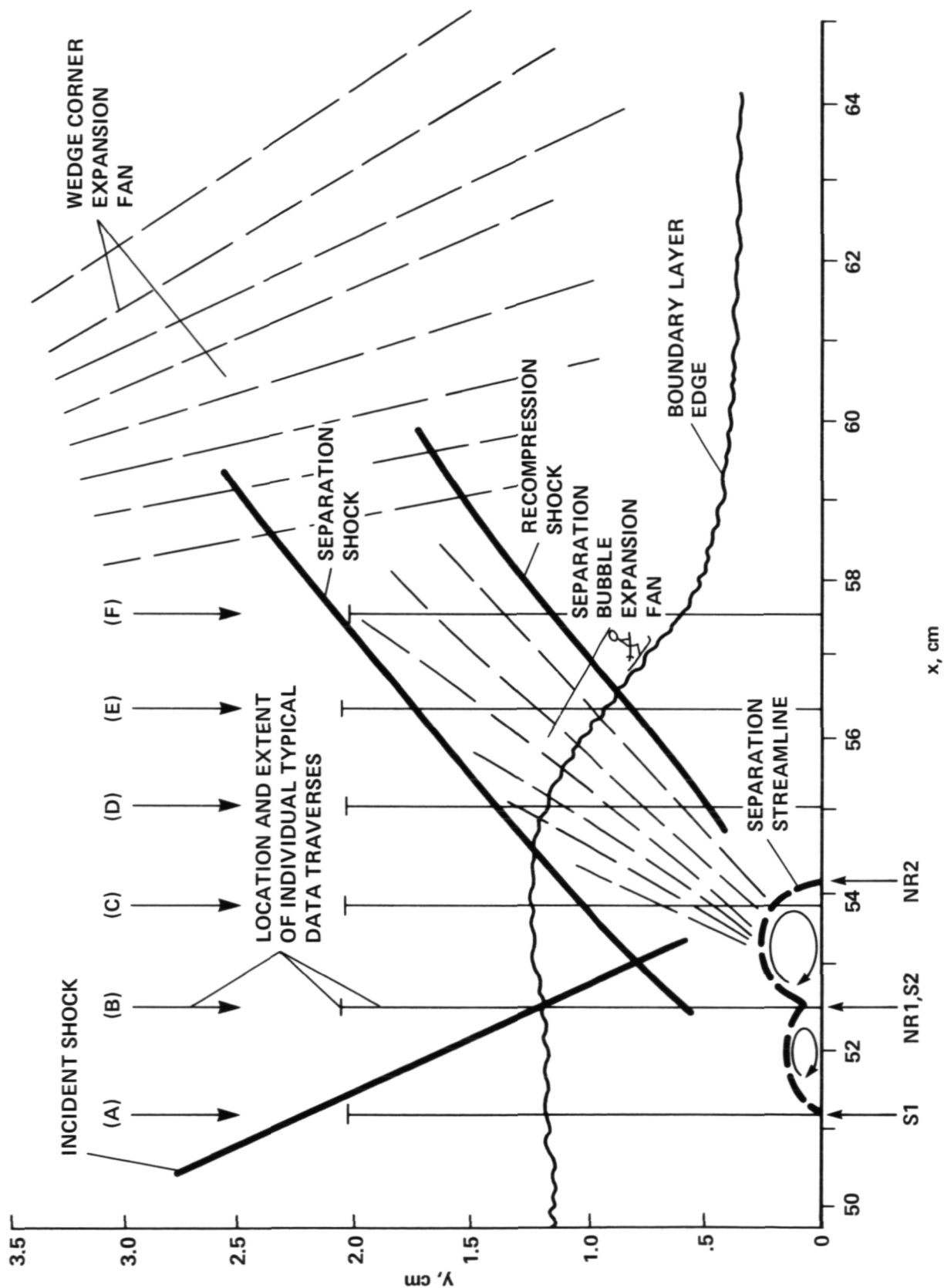
(a) Static pressure.

Figure 10.- Measured pressure profiles on the windward plane of symmetry of a cylinder with impinging shock at  $M = 3$ .



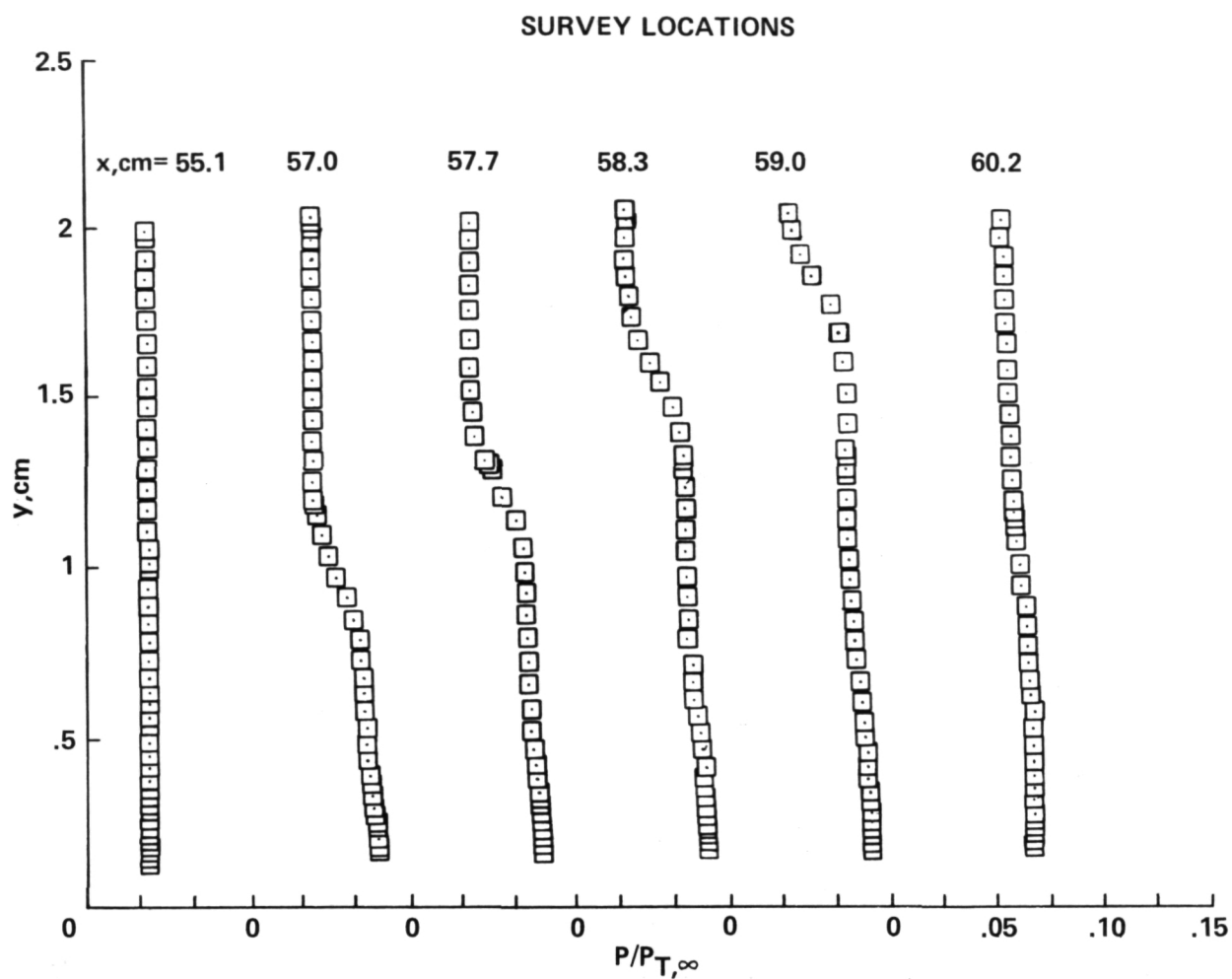
(b) Total pressure.

Figure 10.- Continued.



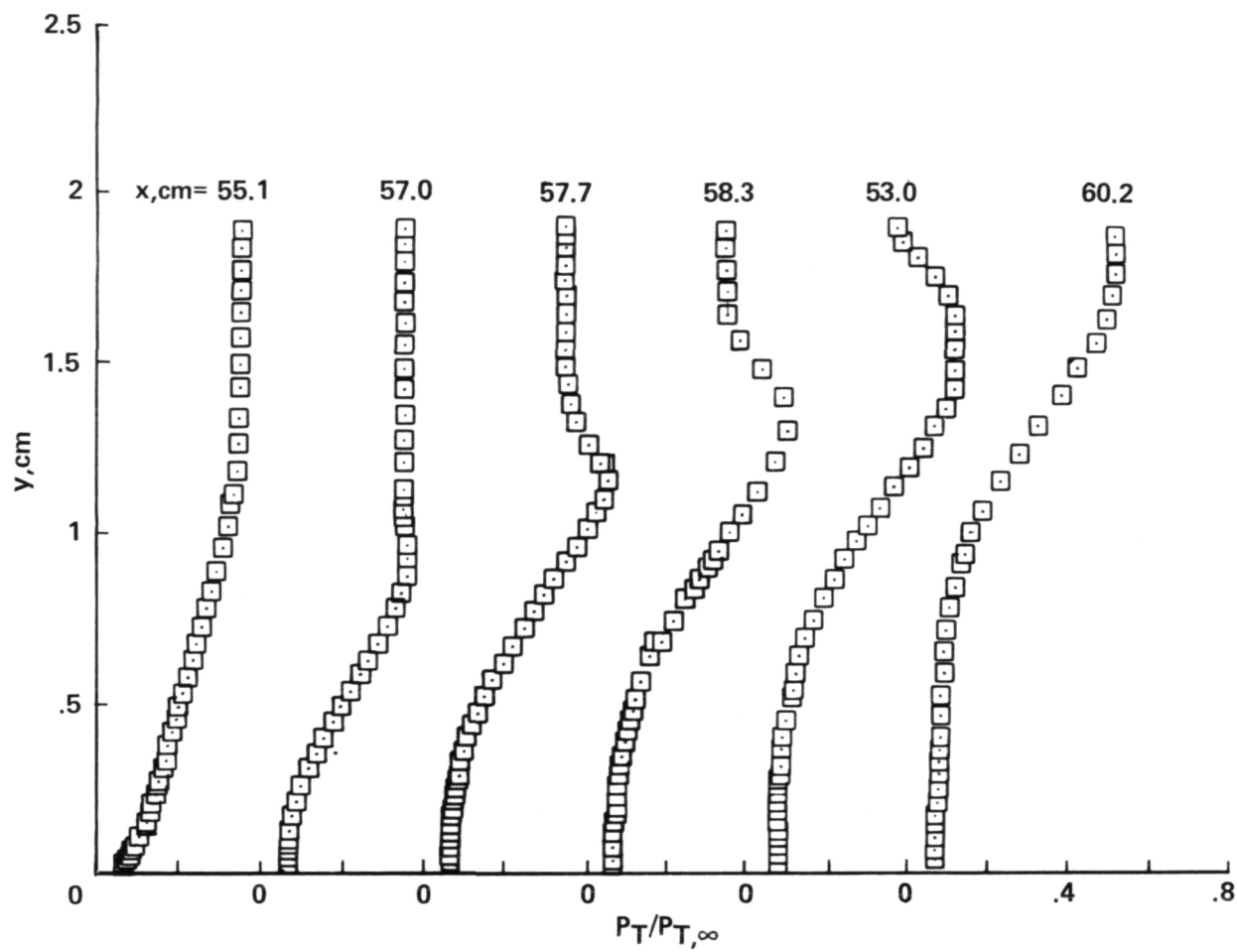
(c) Flow field interpretation.

Figure 10.- Concluded.



(a) Static pressure.

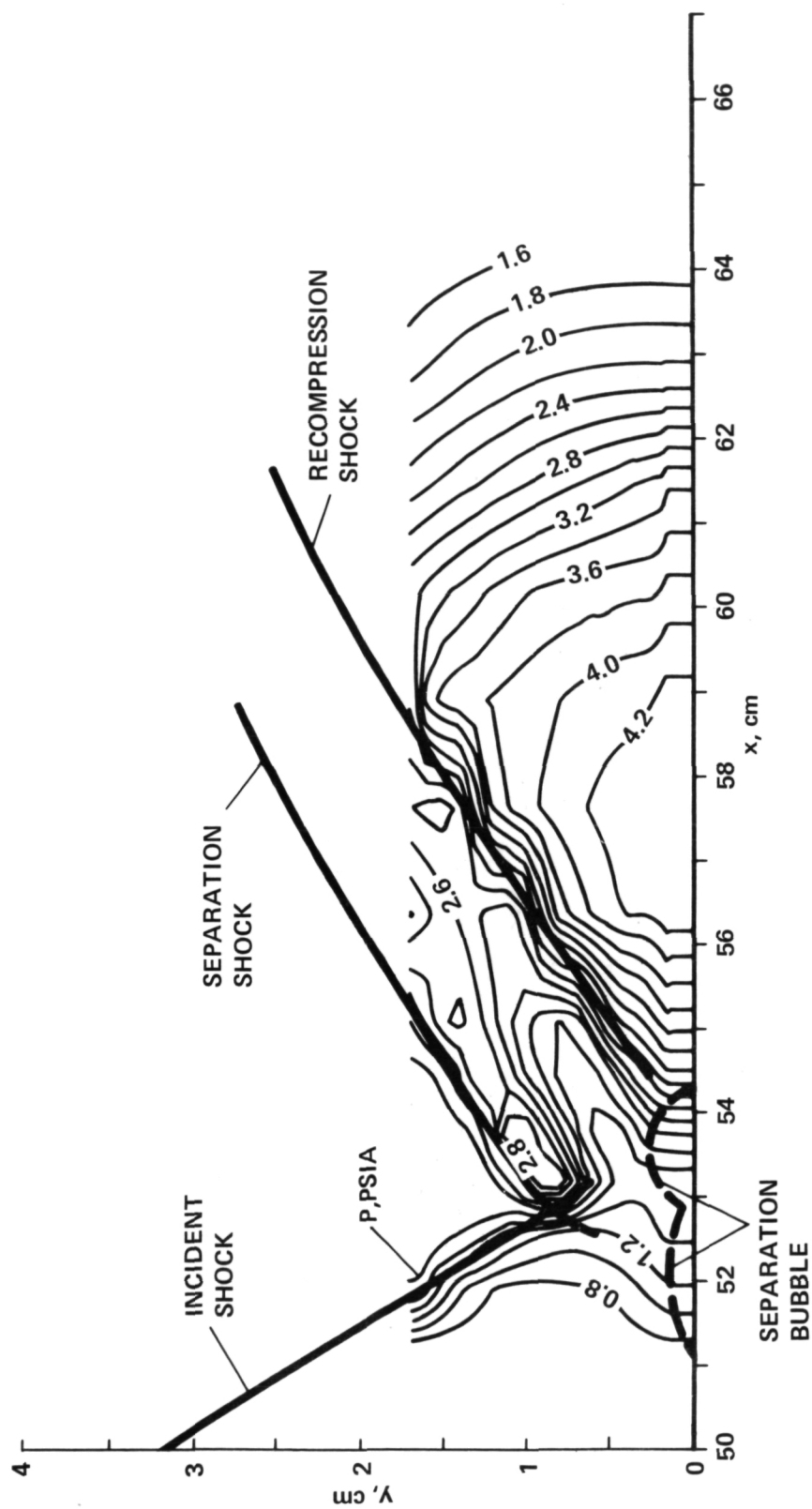
Figure 11.- Measured pressure profiles on the leeward plane of symmetry of a cylinder with impinging shock at  $M = 3$ .



(b) Total pressure.

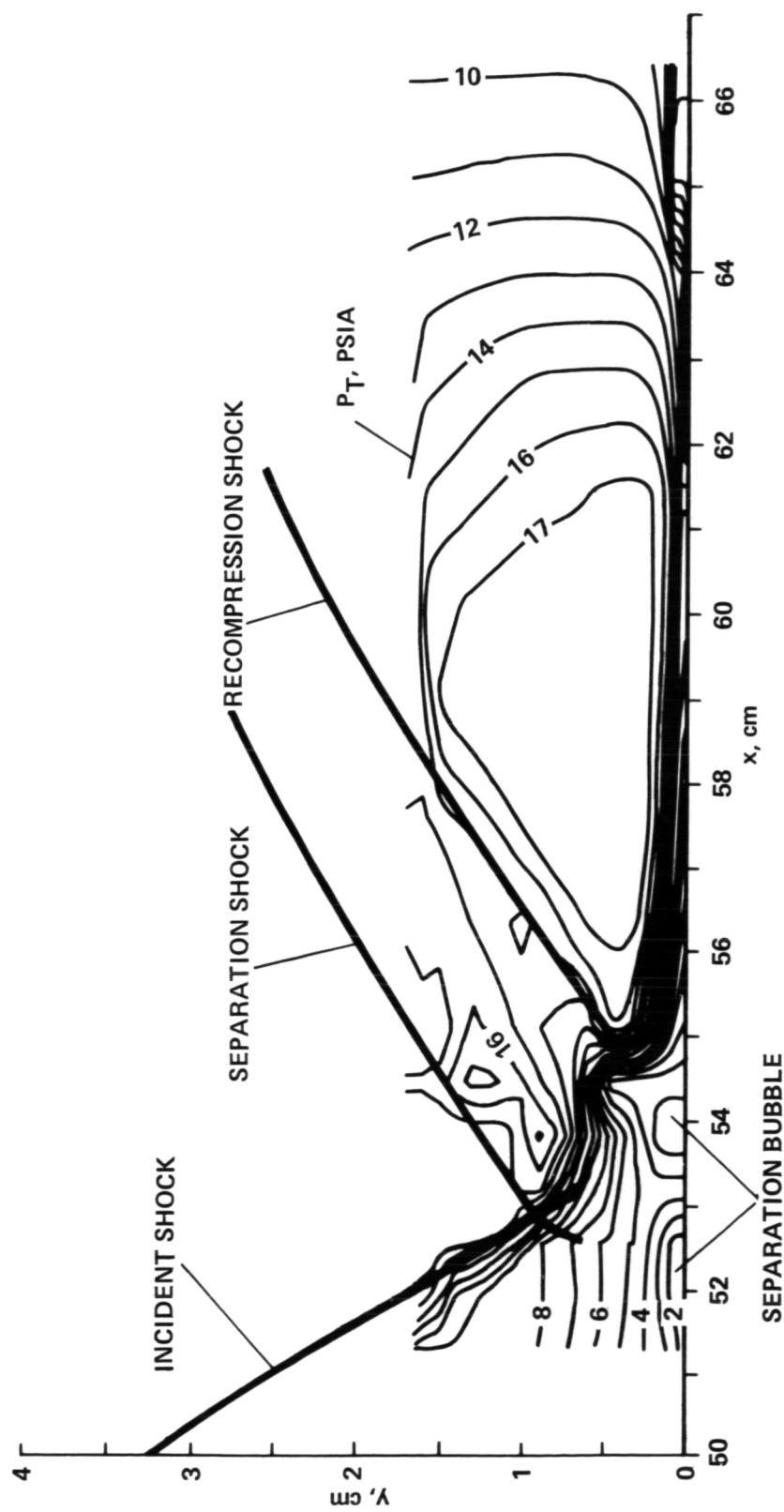
Figure 11.- Concluded.





(a) Static pressure.

Figure 12.- Measured pressure contours on the windward plane at  $M = 3$ .



(b) Total pressure.

Figure 12.- Concluded.

1. Report No. NASA TM-84410	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle AN EXPERIMENTAL INVESTIGATION OF THE IMPINGEMENT OF A PLANAR SHOCK WAVE ON AN AXISYMMETRIC BODY AT MACH 3		5. Report Date November 1983	
		6. Performing Organization Code	
7. Author(s) A. Brosh and M. I. Kussoy		8. Performing Organization Report No. A-9490	
		10. Work Unit No. T-4219	
9. Performing Organization Name and Address Ames Research Center Moffett Field, California 94035		11. Contract or Grant No.	
		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, D.C. 20546		14. Sponsoring Agency Code 506-51-11	
15. Supplementary Notes Point of Contact: M. I. Kussoy, Ames Research Center, M/S 229-1, Moffett Field, Calif. 94035 (415) 965-6452 or FTS 448-6452			
16. Abstract <p>This work presents an experimental study of the flow caused by a planar shock wave impinging obliquely on a cylinder. The investigation was undertaken to attain two goals. First, to experimentally investigate and document the complex three-dimensional shock wave and boundary-layer interaction occurring in practical problems, such as the shock wave impingement from the shuttle nose on an external fuel tank, and store carriage interference on a supersonic tactical aircraft. Second, to supply a data base for numerical computations of complex flows. The experimental techniques included pressure measurements and oil flow patterns on the surface of the cylinder, and shadowgraphs and total and static pressure surveys on the leeward and windward planes of symmetry. The complete data is presented in tabular form for future use. Some typical results are presented separately and discussed in more detail. The results reveal a highly complex flow field with two separation zones, regions of high crossflow, and multiple reflected shocks and expansion fans.</p>			
17. Key Words (Suggested by Author(s)) Fluid mechanics Boundary layer		18. Distribution Statement Unlimited  Subject Category - 34	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 160	22. Price* A06